STATE OF TENNESSEE
DEPARTMENT OF HEALTH
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FREDIA S. WADLEY, MD, MSHPA
COMMISSIONER

January, 2001

MEMORANDUM

To: Tennessee Health Status Report Users

From: Fredia Wadley, M.D.

Subject: Tennessee Health Status Report, 2000

The Tennessee Department of Health is pleased to provide you with this copy of the **Tennessee Health Status Report, 2000**. This is the fourth annual report in this series, which documents the health status of Tennesseans. This and the three previous reports may be viewed on our "Health Information Tennessee" (HIT) web site, which contains a wealth of health statistics and information upon which these Health Status Reports are based. Collectively the four annual Health Status Reports cover a wide range of important subjects concerning our health.

The Health Status Reports and the Health Information Tennessee web site are the result of the continuing partnership between the Tennessee Department of Health and the Community Health Research Group of the University of Tennessee, Knoxville. Under the direction of Dr. Sandra Putnam, the Community Health Research Group provides research, including data processing, data analysis, and report writing to produce the Health Status Reports. Our internet site provides widespread dissemination of a constantly growing data base, and allows customized reports tailored to your needs. We encourage you to visit the site at: **server.to/hit**

We at the Tennessee Department of Health hope that you find this report and the growing internet site informative and helpful. Any questions or comments may be directed to Bill Wirsing at (615)532-7901.

TABLE OF CONTENTS -- TENNESSEE HEALTH STATUS REPORT, 2000

INTRODUCTION

! **The Tennessee Health Status Report, 2000** is the fourth in a series of **Tennessee Health Status Reports**. These reports are benchmark, objective appraisals of the health status of Tennesseans.

! Three focal points are current health-related characteristics of the population, emerging health issues, and guidelines for improvement.

! Baseline health status information is provided at state, regional, and county levels by age, gender, race, and risk, supplemented by access to tables, reports and case level data for customized analysis and mapping on the Health Information Tennessee (HIT) Web site (*server.to/hit)*.

! Population subgroups at excess risk of health problems and disability are identified and profiled.

! Selected indicators from CDC's Healthy People 2000 goals are analyzed, and progress toward their achievement is monitored.

! Data are presented for health manpower, hospitals, nursing homes and other health facilities, and for services utilization. Health professionals are classified by major professional category. Focus is given to mid-level practitioners -- nurse-practitioners, nurse-midwives and physician assistants as well as physicians, dentists, and other health practitioners. Licensed, regulated health facilities - hospitals and nursing homes - are located and described at the county level.

! Goals of Report 2000 are to:

- provide baseline measures for health status and problem identification in Tennessee;
- present trends over time in key health indicators;
- further develop needs assessment and planning infrastructure;
- maximize communication via integrated data-sharing technologies;
- target potential year-by-year goals; and
- identify possible outcome measures to monitor goal attainment.

! The Tennessee Department of Health (TDH) is a department of State government headed by a cabinet level appointee reporting directly to the Governor.

! TDH divides the State into 14 statistical regions - 6 metropolitan counties and 8 nonmetropolitan clusters of counties.

! Health departments in each of 95 counties have a county health officer, a local county director, and a board of health. Each county and region has established a

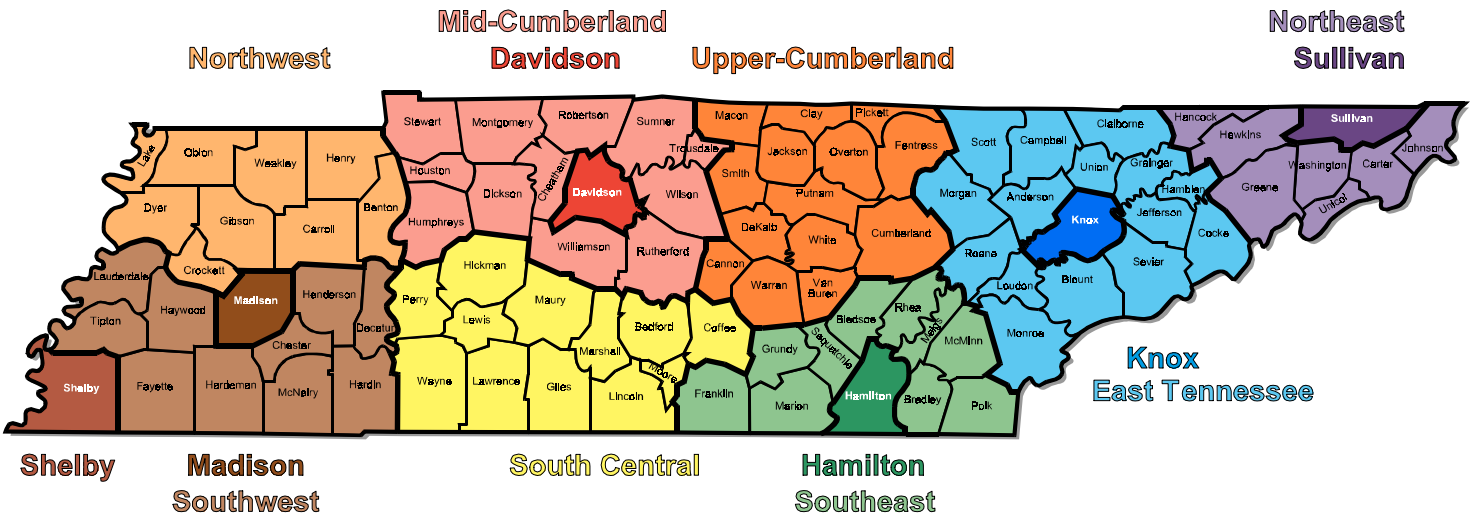
health council composed of community residents to support the Community Diagnosis Initiative begun in 1995.

- The vision of the TDH is for “healthy individuals, families, and communities for a healthy Tennessee.”

- The mission of the TDH is to provide the leadership and support necessary to promote, protect, and improve the physical and mental health and well-being of Tennesseans.

- To accomplish the mission of the Department, two major goals have been established: to offer every child a safe, healthy start and to protect the public’s health.

TENNESSEE'S HEALTH DEPARTMENT REGIONS



Metropolitan Regions are six counties: Sullivan, Knox, Hamilton, Davidson, Madison and Shelby.
Nonmetropolitan Regions are eight clusters of counties listed below.

Northeast
Carter
Greene
Hancock
Hawkins
Johnson
Unicoi
Washington

East
Anderson
Blount
Campbell
Claiborne
Cocke
Grainger
Hamblen
Jefferson
Loudon
Monroe
Morgan
Roane
Scott
Sevier
Union

Southeast
Bledsoe
Bradley
Franklin
Grundy
Marion
McMinn
Meigs
Polk
Rhea
Sequatchie

Upper Cumberland
Cannon
Clay
Cumberland
DeKalb
Fentress
Jackson
Macon
Overton
Pickett
Putnam
Smith
Van Buren
Warren
White

Mid-Cumberland
Cheatham
Dickson
Houston
Humphreys
Montgomery
Robertson
Rutherford
Stewart
Sumner
Trousdale
Williamson
Wilson

South Central
Bedford
Coffee
Giles
Hickman
Lawrence
Lewis
Lincoln
Marshall
Maury
Moore
Perry
Wayne

Northwest
Benton
Carroll
Crockett
Dyer
Gibson
Henry
Lake
Obion
Weakley

Southwest
Chester
Decatur
Fayette
Hardeman
Hardin
Haywood
Henderson
Lauderdale
McNairy
Tipton

MORTALITY IN TENNESSEE

General Mortality

! Expectation of life for a Tennessee newborn in 1998 was 74.5 years. This compares with 74.8 years in 1997. Life expectancy at birth in 1998 was 78.0 years for females and 71.2 years for males. Distinguishing the Tennessee population by race and gender, life expectancies for white females, black females, white males, and black males in descending order were 79.1 years, 73.6 years, 72.4 years, and 65.0 years. Corresponding 1997 figures were 79.2, 73.1, 72.2, and 64.3 years. Thus, blacks of both genders registered at least a half-year annual gain, while white females manifested a very small loss in life expectancy at birth and white males experienced a very small gain.

! The 1998 crude death rate in Tennessee was 981 deaths per 100,000 population. Higher mortality among males than females was reflected in their respective crude death rates of 1,024 and 941 deaths per 100,000 population. The crude death rate of whites, 996 deaths per 100,000, exceeded that of blacks, 950 per 100,000. This differential is explained by the younger age composition of blacks as compared to whites. Once the death rate was adjusted for age differences[1], the death rate for blacks rose to 1,279 per 100,000 and that for whites declined to 934 per 100,000. Respective age-adjusted death rates for black males, white males, black females, and white females were 1,688, 1,200, 1,019, and 752 per 100,000 population.

! Crude death rates for metropolitan and nonmetropolitan residents of Tennessee were 952 and 1,002, respectively. After age-adjustment[1], the rate for the metropolitan population exceeded that for the nonmetropolitan population, 1,006 versus 955 per 100,000. Further differentiating the population by race and gender, black male residents in metropolitan areas exhibited the highest age-adjusted death rate, 1,793 per 100,000. The rate for black males in nonmetropolitan areas was second highest at 1,434 deaths per 100,000. By contrast, the lowest age-adjusted death rates were registered for metropolitan and nonmetropolitan white females, at 746 and 755 deaths per 100,000 population, respectively. Regardless of whether they resided in metropolitan or nonmetropolitan areas, black females had lower age-adjusted death rates (1,051 and 929) than white males (1,182 and 1,212 per 100,000, respectively).

! Annualized age-adjusted mortality rates for 1996-1998 are higher in metropolitan regions than nonmetropolitan regions of Tennessee at 1,016 and 954 per 100,000[1], respectively. Among Tennessee Health Department regions, the Mid-Cumberland Region had the lowest annualized age-adjusted death rates (902.6), while Shelby County had the highest (1,081.1). Three rural counties had the highest 1996-98

[1]All age-adjusted rates use the year 2000 standard million population.

age-adjusted death rates -- Fentress (1,160.2), Lauderdale (1,142.1) and Tipton (1,124.8) Counties, while Lewis (839.1), Cumberland (798.8), and Williamson (738.2) Counties had the lowest rates.

Premature Mortality

! Years of potential life lost (YPLL) before age 65 is a common public health measure of premature mortality. In 1998, deaths from all causes accounted for 267,426 years lost among the Tennessee population. This translated into a YPLL rate of 5,722 per 100,000. Approximately one-third of the lost years was attributable to injury, the combination of unintentional ("accidental") injury, suicide and homicide. Cancer and heart disease accounted for 16% and 14% of the premature mortality burden, respectively.

! Rates of YPLL for black males, black females, white males, and white females in 1998 were 11,804, 6,726, 6,458, and 3,559 per 100,000 population, respectively. Injury was the leading cause of YPLL for each of these race-gender groups. Its share of the YPLL total was 33% for black males, 16% for black females, 40% for white males, and 26% for white females. Only for white females did cancer exceed heart disease as a cause of premature mortality, where the cancer contribution was 23% of the total as compared to 11% for heart disease.

Leading Causes of Death

! Duplicating the 1997 experience, the five leading causes of death in Tennessee in 1998 were heart disease, cancer, stroke, unintentional injury, and chronic obstructive pulmonary disease (COPD). Respective rates were 303, 220, 73, 48 and 48 deaths per 100,000 population[2]. Collectively, they accounted for 71% of all deaths.

! Heart disease, cancer and stroke were the top three causes of death for white males, and blacks of either gender. For white males, heart disease and cancer were also the top two causes of death. But for this group, unintentional injury ranked third, followed by COPD and stroke. COPD and the combined category of pneumonia and influenza ranked equal fourth as a cause of death among white females. Respective fourth and fifth ranked causes of death for black males were unintentional injury and homicide, and for black females diabetes mellitus and pneumonia and influenza[2].

! Unintentional injury ranked second as a cause of death for Tennesseans ages 15-24 years and third for those ages 25-29. Homicide was the leading killer among black males ages 15-34. Suicide was the second leading cause of death among

[2]The ranking of causes of death is based on rates, not numbers of deaths.

Tennesseans ages 25-34 and third for those ages 15-24. Among white males ages 15-34, suicide ranked second, and among corresponding black males and white females, it ranked third. Rates in that age-group for white and black males were 29.1 and 13.2 suicides per 100,000 population, respectively. For white females, the suicide rate was 7.1, and 2.8 for black females.

! Respective heart disease death rates in 1998 for white females, white males, black males, and black females were 306, 316, 293 and 272 deaths per 100,000 population. Corresponding death rates for the second largest cause of death, cancer, were 201, 251, 240 and 175 per 100,000. Together, heart disease and cancer accounted for at least half of the deaths among white females (53%), white males (55%), black males (50%), and black females (52%).

Infant/Neonatal/Postneonatal Mortality

! Infants are children under one year of age. In 1998, Tennessee's infant mortality rate was 8.2 deaths per 1,000 live births. The rate for blacks was 15.1 and 6.3 for whites. Neonatal deaths are deaths to infants under 28 days of age. Respective neonatal death rates in 1998 for the overall Tennessee population, for blacks and for whites were 5.6, 10.9 and 4.1 per 1,000 live births. Postneonatal deaths are deaths to infants aged 28 days and older. Postneonatal death rates were 2.6, 4.2 and 2.2 per 1,000 live births for the Tennessee population, blacks and whites, respectively. Neonatal mortality predominantly reflects endogenous causes - genetic problems or problems associated with pregnancy. By contrast, postneonatal mortality predominantly stems from exogenous or socio-environmental causes.

! The three leading causes of infant mortality in Tennessee in 1998 were congenital anomalies, short gestation and unspecified low birthweight, and sudden infant death syndrome (SIDS). These causes were responsible for almost half of all infant deaths in the Tennessee population, and among both blacks and whites. Congenital anomalies, and short gestation and low birthweight were the leading causes of neonatal mortality for all three groups. SIDS ranked first as a cause of postneonatal mortality. This disease accounted for 35% of all postneonatal mortality in Tennessee, and 35% of corresponding deaths among whites and 34% among blacks. Unintentional injury ranked as the third leading cause of postneonatal mortality in Tennessee as a whole, and for whites. In the case of blacks, unintentional injury and the combined category of pneumonia and influenza ranked equal third as killers.

Selected Cause-Specific Mortality Trends

! Homicide has exacted an especially heavy toll among younger black males in Tennessee. But there is evidence of an improving situation. The rate in 1998 for black males ages 15-34 years was 107 per 100,000 population. This was 32% less than the corresponding peak rate registered during the 1990s - the 1992 rate of 157

homicides per 100,000. It was also 11% less than the second lowest rate recorded in the 1990s, 120 in 1997.

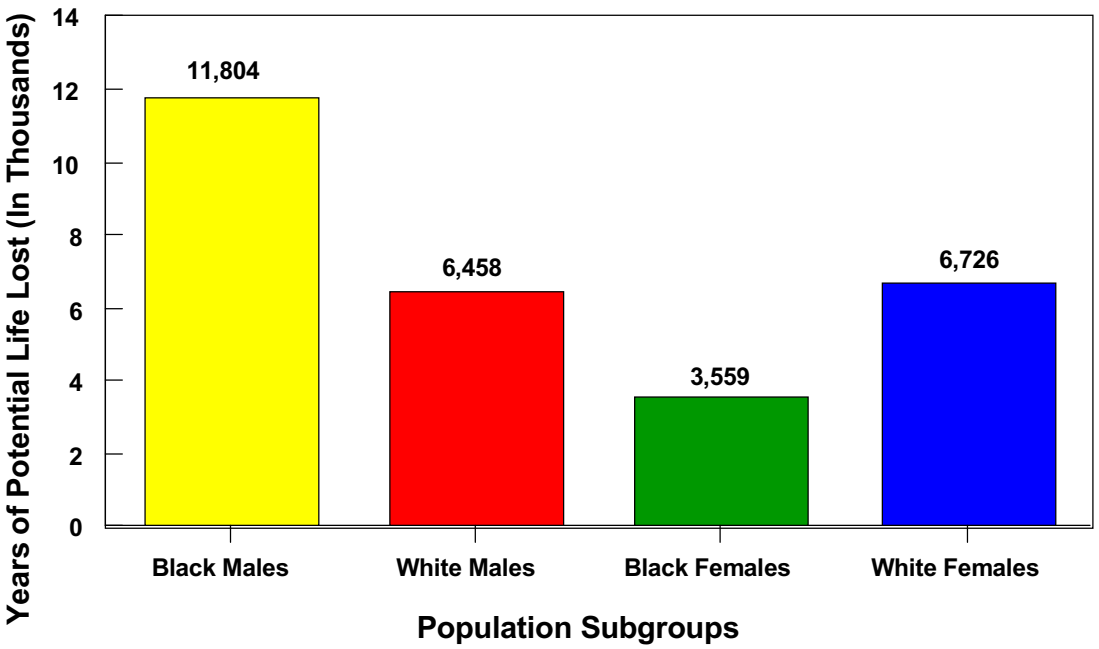
- The suicide rate at ages 15-34 for whites and blacks of either gender fluctuated between 1990 and 1998. But the rate for black males in 1998, 13 per 100,000 population, was the lowest rate recorded for this age-group over the observation period. It was 31% less than their second lowest rate - 19 suicides per 100,000 in 1992. It was 56% less than the 1997 rate, the highest rate recorded for this sub-population during the 1990s (30 suicides per 100,000 population).

- Lung cancer is a major public health problem that primarily afflicts the middle-aged and elderly populations. Unlike elderly white and black males, females ages 65 years and older of both races exhibited upward trends in their lung cancer rates during the 1990s. For white females, the annual average rate for the period 1996-1998 (215 per 100,000 population) was 23% higher than the corresponding 1990-1992 rate. The rate for black females (230 per 100,000) was 20% higher than the 1990-1992 rate.

- There are also signs of success in the battle against lung cancer. At ages 35-64 years, black females, and white and black males all manifested declines in their lung cancer death rates during the 1990s. On the other hand, white females in that age-group showed little change (44 per 100,000 in 1996-1998 versus 43 in 1990-1992). Comparison of 1996-1998 age-specific lung cancer death rates to corresponding 1990-1992 rates revealed a 30% decline among black females (to 34 per 100,000), an 18% decline among black males (to 123 per 100,000), and an 11% decline among white males (to 91 per 100,000).

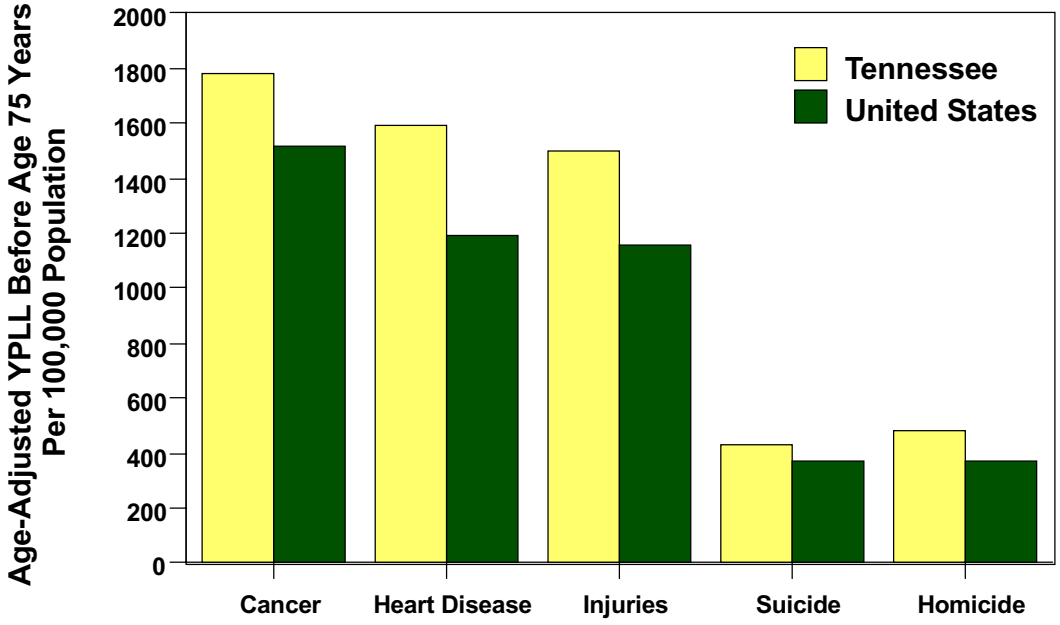
Source: Tennessee Department of Health, Office of Health Statistics and Research, and Health Information Tennessee (HIT) Web site (**server.to/hit**).

Years of Potential Life Lost (YPLL) by Race and Gender, Tennessee, 1998



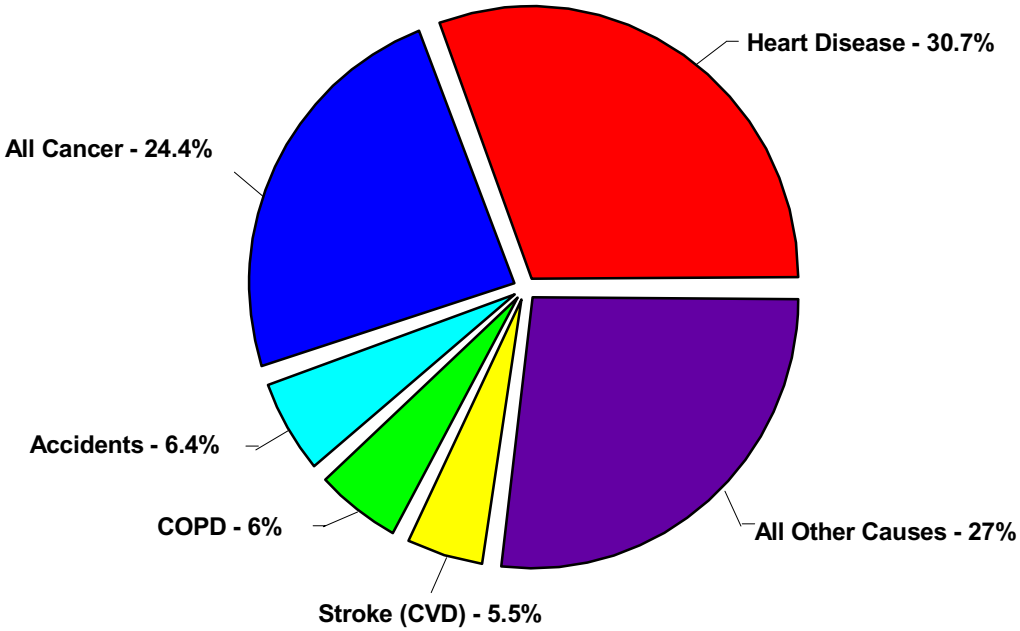
Source: Health Statistics and Research, Tennessee Department of Health, 1998, and HIT/SPOT Web site (server.to/hit)

Years of Potential Life Lost (YPLL) Before Age 75 Years: Leading Causes Tennessee and United States, 1997



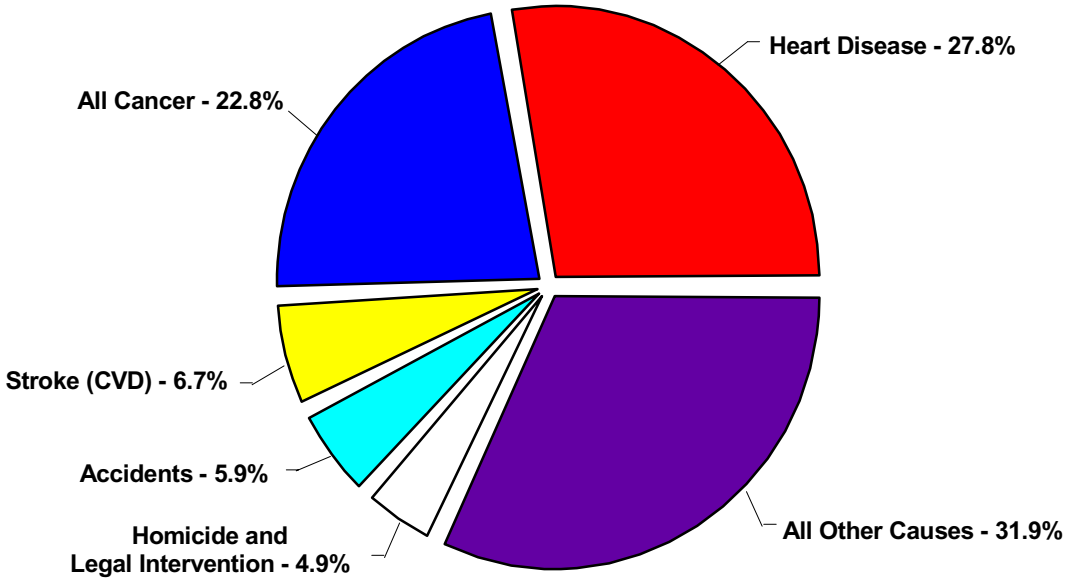
Note: Injuries = Unintentional injuries.
Source: Tennessee State Health Profile, 2000, CDC.

Top Five Leading Causes of Death among White Males, Ages 1-85+, Tennessee, 1998



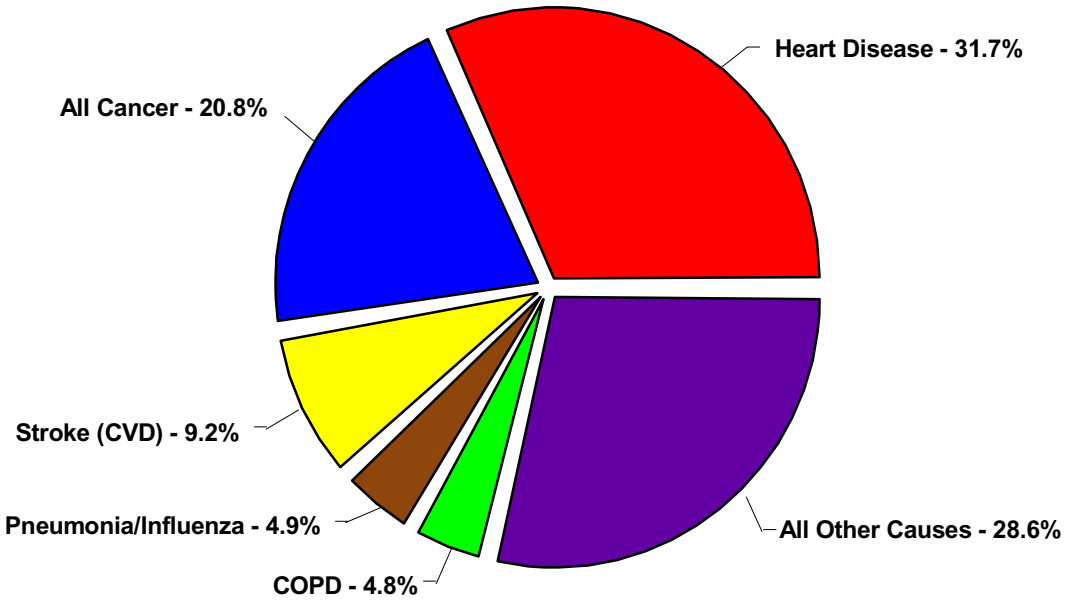
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (server.to/hit)

Top Five Leading Causes of Death among Black Males, Ages 1-85+, Tennessee, 1998



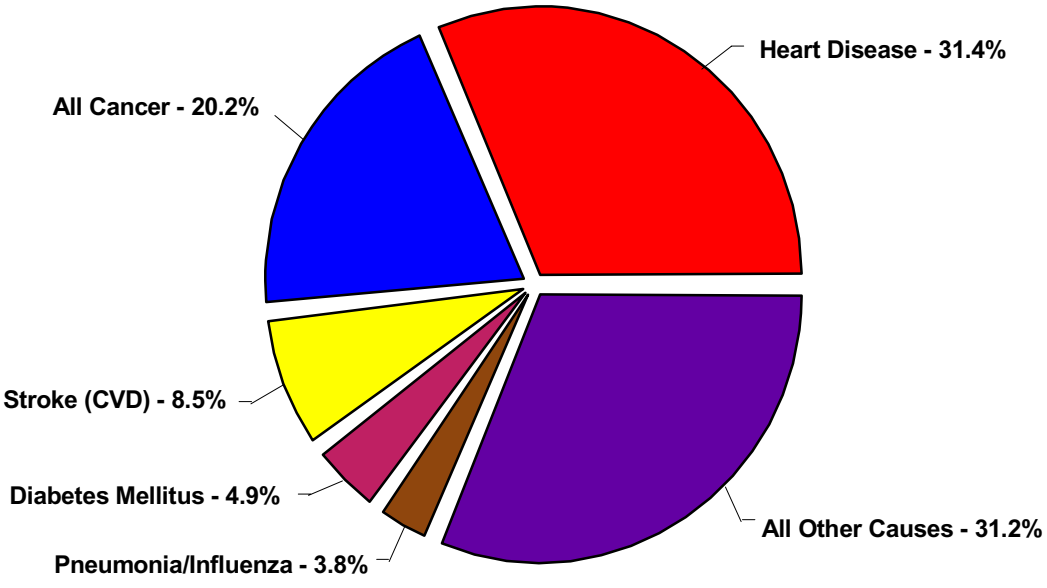
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (server.to/hit)

Top Five Leading Causes of Death among White Females, Ages 1-85+, Tennessee, 1998



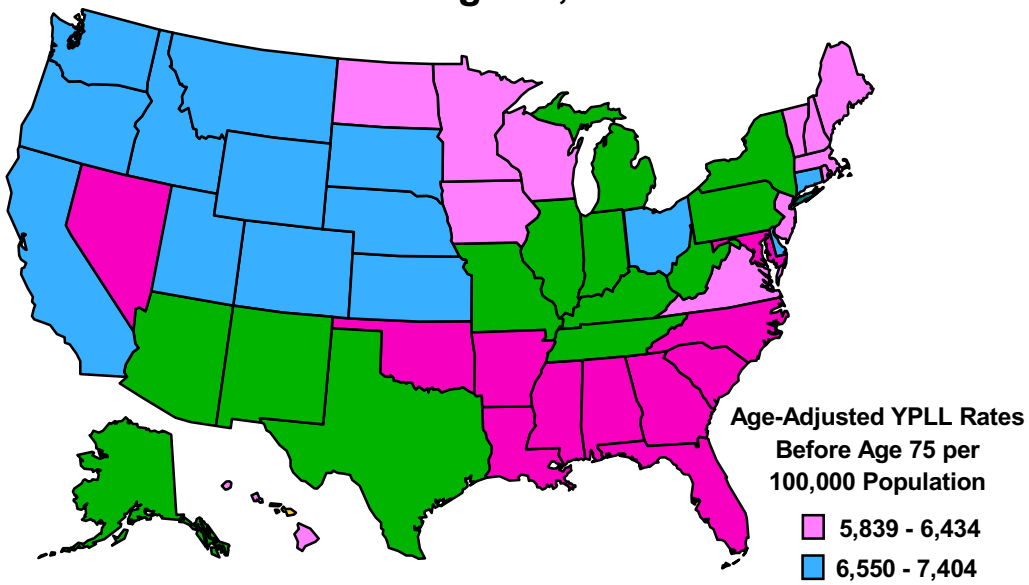
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (server.to/hit)

Top Five Leading Causes of Death among Black Females, Ages 1-85+, Tennessee, 1998



Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (server.to/hit)

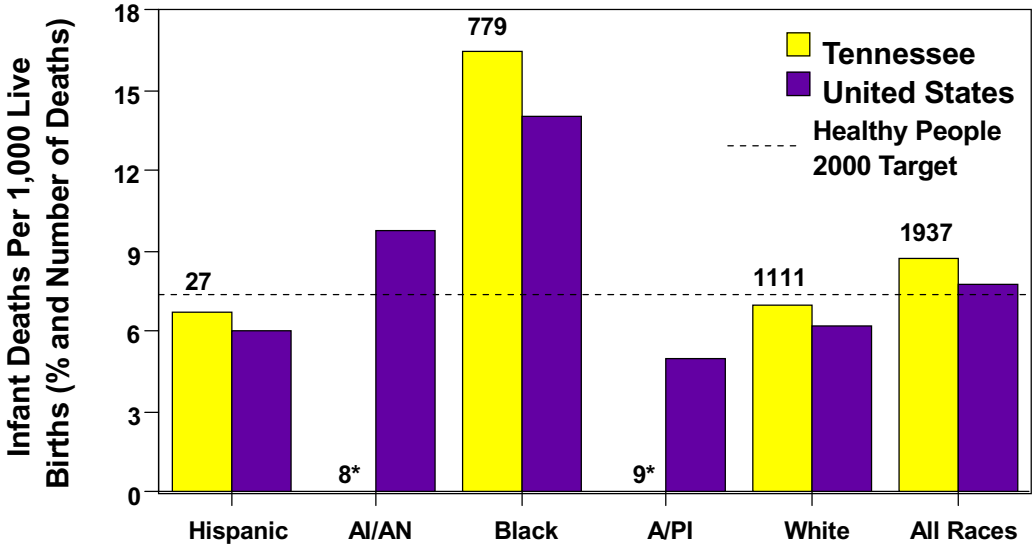
Years of Potential Life Lost (YPLL) Before Age 75, 1996



Tennessee - 9,041; United States - 7,743

Source: Tennessee State Health Profile, 1999, CDC.

Infant Mortality Rates and Number of Deaths by Race and Hispanic Origin Tennessee and United States, 1995-97

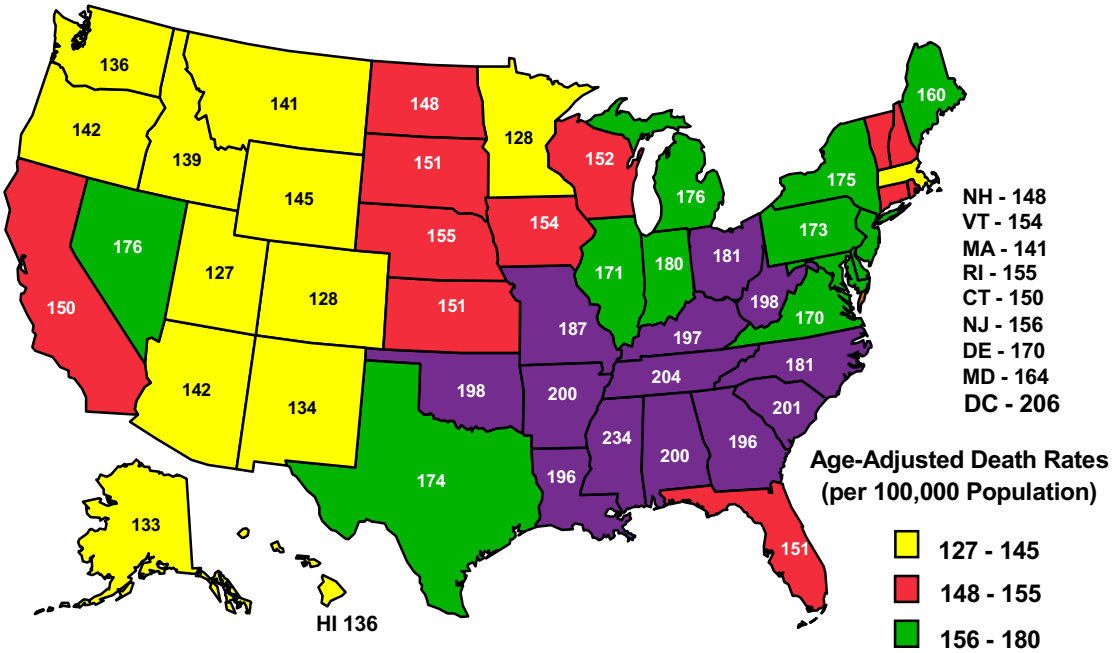


*Rate is based on fewer than 20 deaths and is considered unreliable.

Note: AI/AN = American Indian/Alaska Native; Black = Black Non-Hispanic; A/PI = Asian/Pacific Islander; White = White Non-Hispanic.

Source: Tennessee State Health Profile, 2000, CDC.

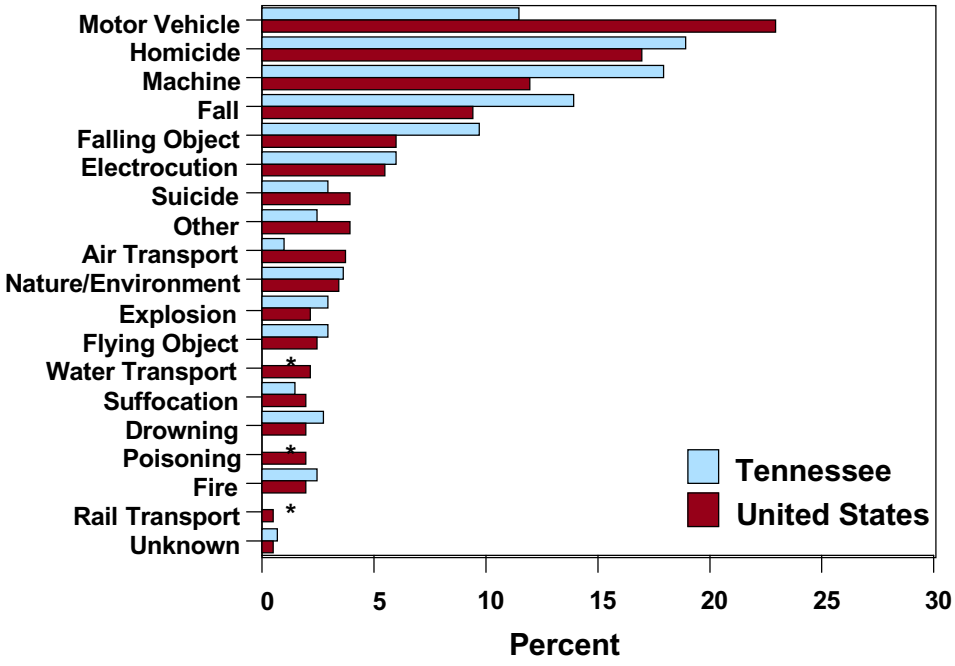
Age-Adjusted Total Cardiovascular Disease Death Rates, 1997



Tennessee - 294; United States - 167

Source: Tennessee State Health Profile, 2000, CDC.

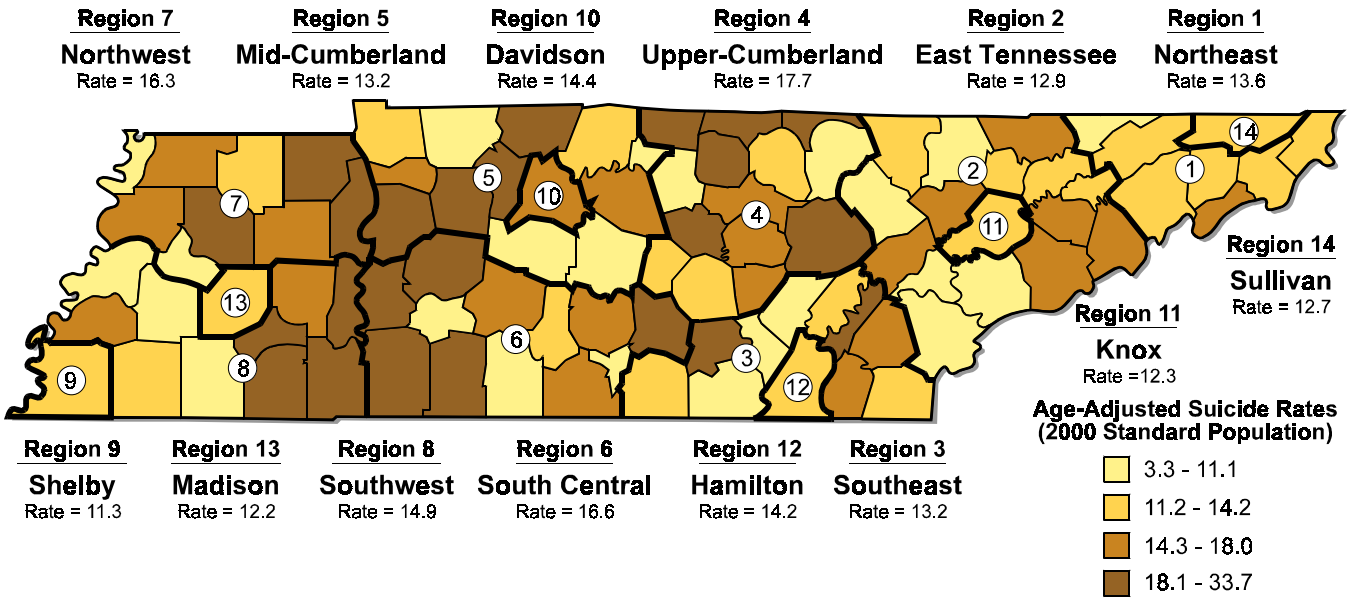
Percent of Traumatic Occupational Fatalities by Cause of Death Tennessee and United States, 1991-95



*Fewer than 3 deaths in this category

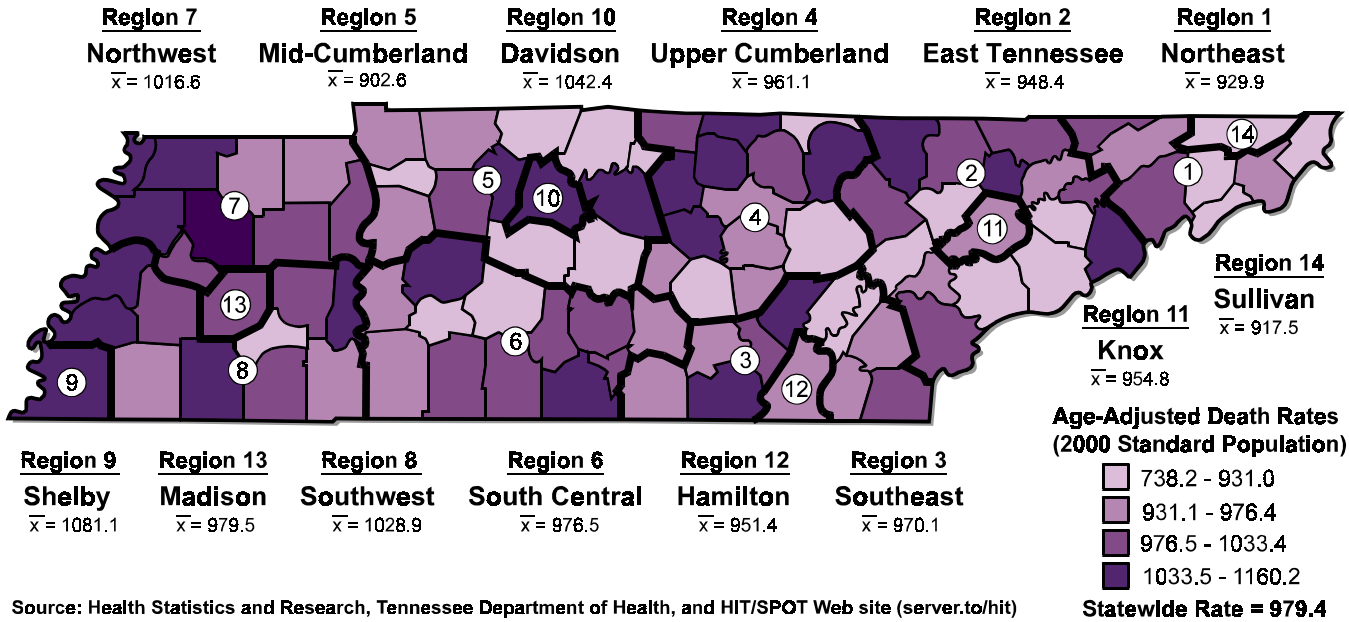
Source: Tennessee State Health Profile, 2000, CDC

ANNUALIZED AGE-ADJUSTED SUICIDE RATES (PER 100,000 POPULATION) BY COUNTY AND REGION, TENNESSEE, 1996-98



Source: Health Statistics and Research, Tennessee Department of Health, and HIT/SPOT Web site (server.to/hlt)

AGE-ADJUSTED ALL-CAUSE DEATH RATES (PER 100,000) BY COUNTY AND REGION, TENNESSEE, 1996-1998



Source: Health Statistics and Research, Tennessee Department of Health, and HIT/SPOT Web site (server.to/hit)

CHILDREN'S HEALTH AND WELL-BEING IN TENNESSEE

The TNKIDS Initiative

TNKIDS is a continuing effort to better coordinate and improve services for children. The goal is to give all children the opportunity to be successful in life by offering a safe, healthy start and an excellent education. Collaborating within State government to accomplish this goal are the Departments of Health, Children's Services, Human Services, Education, Mental Health and Developmental Disabilities, as well as the Commission on Children and Youth, and the Council of Juvenile and Family Court Judges. The TNKIDS component of the Health Information Tennessee Web site is one of the ways in which information sharing and exchange across State agencies can respond to and support Governor Sundquist's challenge to offer every child in the State a safe, healthy start and an excellent education.

The TNKIDS departments have been working with the Community Health Research Group (CHRG) to establish the TNKIDS component of the Health Information Tennessee (HIT) Web site. This Web site, using innovative interactive programming, contains:

- State and county health-related data
- Tennessee Kids Count reports
- Links to National Kids Count data
- Information similar to Kids Count data from the departments participating in the TNKIDS Initiative
- County and census tract mapping of geocoded information
- Extensive data specific to particular departments, including education and safety.

Some of the critical issues for children's health and well-being are addressed on HIT TNKIDS and will be summarized here.

Children in Poverty in Tennessee

Poverty among Tennessee's children is declining.

! One measure of poverty is the percent of children ages 1-17 receiving food stamps. Since 1996, this percentage has declined by 16.8%, from 21.4% to 17.8% in 1998.

  - In 1998, counties with the highest percentage of children receiving food stamps were Hancock County (36%), McNairy County (35.7%), and Scott County (34.5%). Those with the lowest prevalence of children receiving food ftamps are Rutherford and Williamson Counties, at 7.3% and 4.9%, respectively.

- That child poverty is decreasing in Tennessee is also evident from the fact that the percentage of children aged 0-17 receiving Families First grant payments (formerly AFDC) has declined over the same period, from 13.4% in 1996 to 8% in 1998, a decline of 40% in just three years.

However, another measure indicative of child poverty is the percentage of children aged 0-13 years enrolled in TennCare, Tennessee's Medicaid waiver program. This figure was 36.9% in 1997 and 38.6% in 1998 (data are not available for earlier years), suggesting some slight increase in TennCare coverage of children in Tennessee.

Children's Health in Tennessee

Some critical measures of children's health and well-being are improving in Tennessee. These include child death rates, teenage pregnancy and birth rates and rates of commitment of children to state custody.

- The child death rate (deaths per 100,000 persons aged 1-14 years) has been declining in Tennessee since 1992, from 31.3 per 100,000 to 26.1 in 1998. This amounts to a 16.6% decline.

- Infant mortality rates (deaths to persons 0-1 years of age per 1,000 live births) have similarly declined since 1992 from 9.4 per 1,000 to 8.2 in 1998, a 12.8% decline.

- Birth rates among 15-17 year olds have also declined from 1992 to 1998 by 8.4% (from 41.6 births per 1,000 females aged 15-17 years to 38.1 per 1,000, respectively), while adolescent birth rates have declined even more (by 12.8%). Adolescent birth rates declined from 17.2 per 1,000 females ages 10-17 to 15 per 1,000 in the seven-year period from 1992 to 1998.

- The rate of commitment of children to state custody has also declined from 5.4 per 1,000 children ages 0-17 in 1997 to 4.7 per 1,000 in 1998, a 13% decline in one year.

Other measures of child health and well-being in Tennessee either have not improved or have worsened slightly over time.

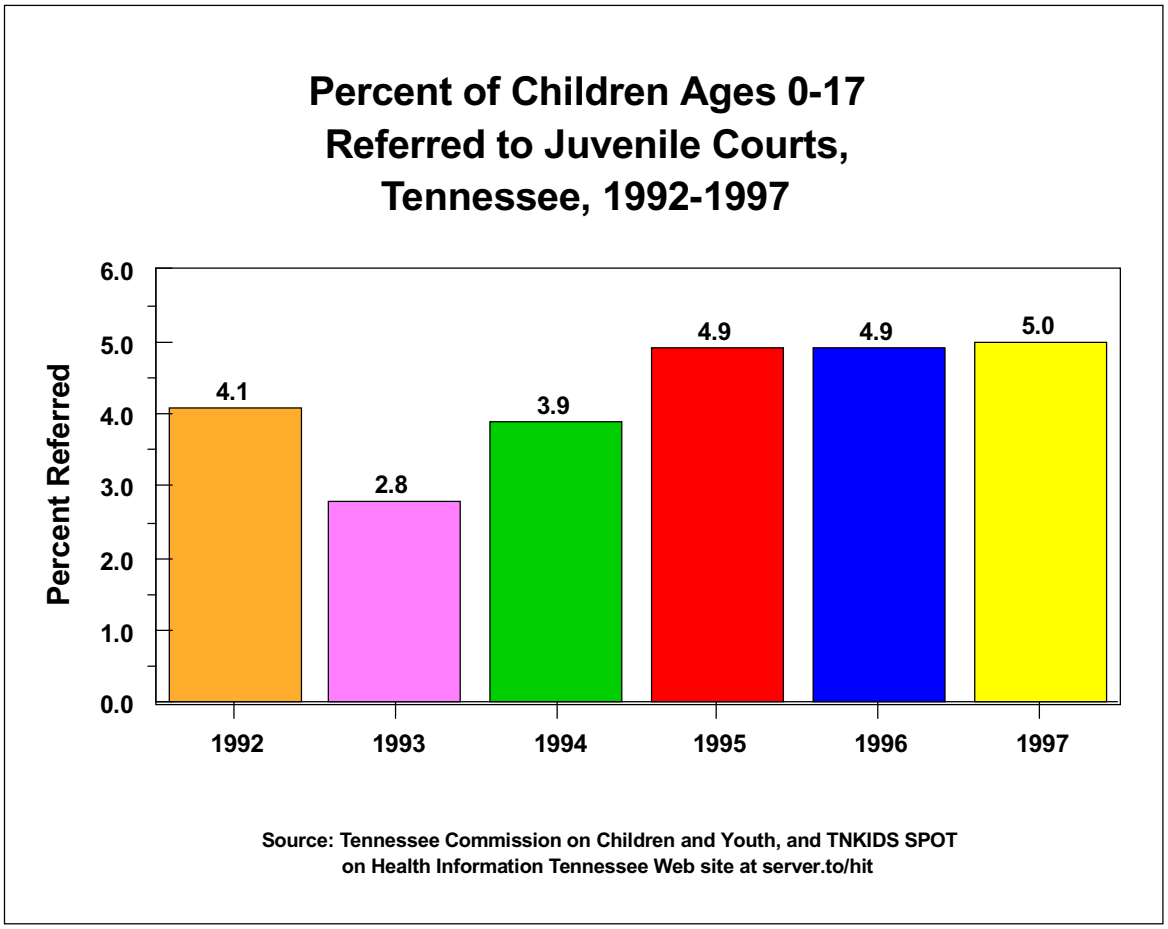
- Teen violent death rates (deaths per 100,000 youth aged 15-19 from accidents, homicide and suicide) have risen in Tennessee from 73.3 in 1992 to 81.4 in 1998; however, most of the increase occurred before 1996 and rates have been relatively stable since then.

- Child abuse and neglect rates among children aged 0-17 have been stable since 1992, the rate in that year of 8.0 matching the rate in 1997.

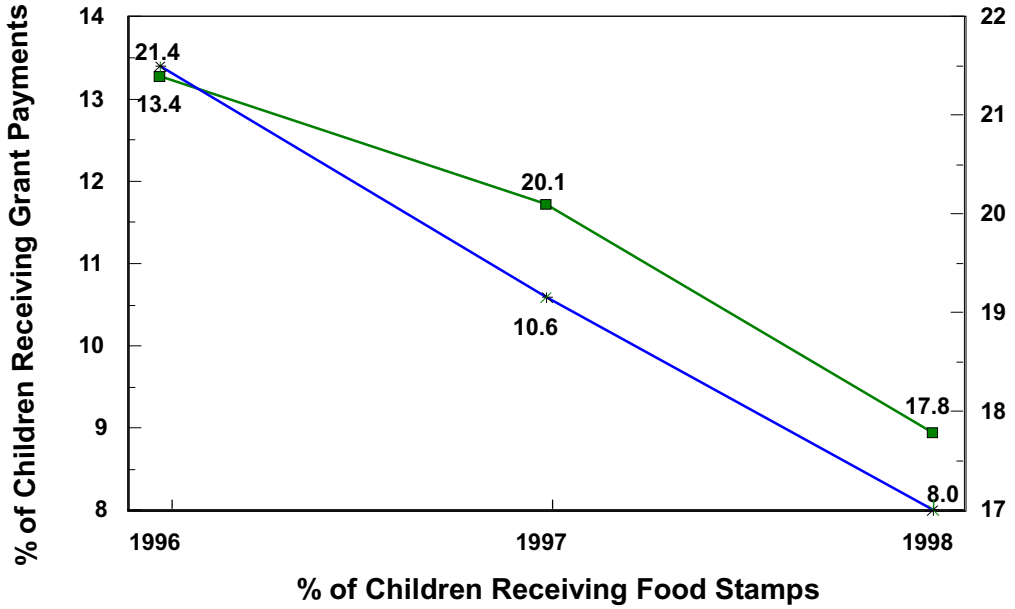
! The percentage of children aged 0-17 referred to juvenile courts has increased in the State since 1992, from 4.1% to 5% of children in 1997, an increase of 22%.

These trends and the relationships between and among child health, poverty and welfare measures are available for custom querying on the Health Information Tennessee Web site at server.to/hit.

Source: Tennessee Commission on Children and Youth.

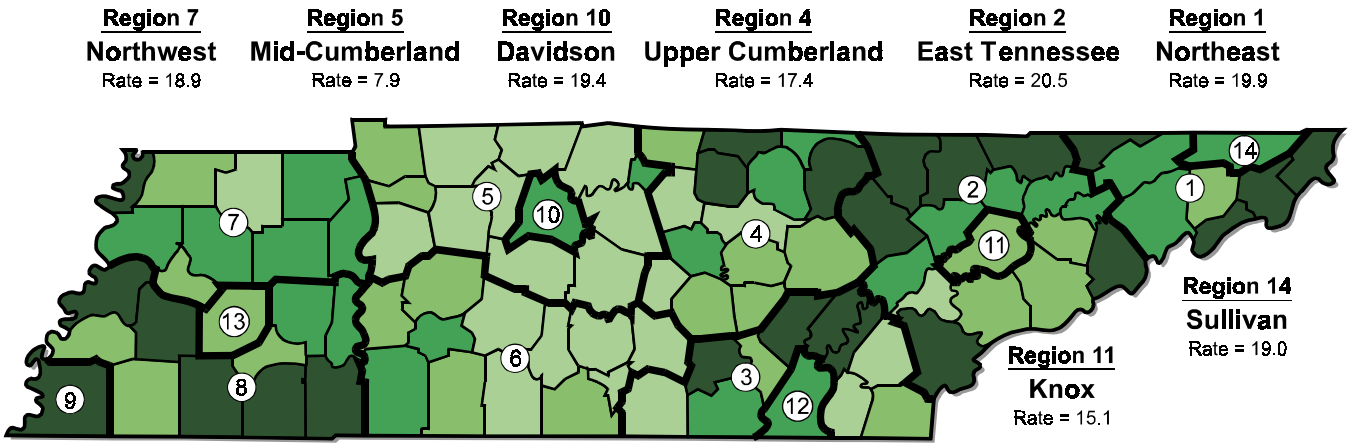


Percent of Children Receiving Families First Grant Payments and Percent of Children Receiving Food Stamps, Tennessee, 1996-1998



NOTE: Children are 0-17 years of age.
Source: Tennessee Commision on Children and Youth and TNKIDS on HIT/SPOT Web site (server.to/hit)

PERCENT OF CHILDREN AGES 0-17 RECEIVING FOOD STAMPS BY COUNTY AND REGION, TENNESSEE, 1998



Source: Tennessee Department of Human Services for Tennessee Commission on Children and Youth, and TNKIDS on HIT/SPOT Web site (server.to/hit)

ASTHMA DIAGNOSES IN YOUTH (AGES 0- 21): HOSPITAL DISCHARGE DATA, 1998[3]

- A total of 24,206 persons aged 0-21 were diagnosed with asthma and treated in a hospital setting in Tennessee in 1998. More than half (60%) of the hospital cases of asthma in youth were in the 0-4 year (38%) and 5-9 year (22%) age-groups. Adolescents and youth aged 10-14 (15%), 15-19 (17%), and 20-21 (8%) made up smaller percentages compared with these younger children (ages 0-9 years).

- Of the total group of youth treated in a hospital setting, based on type of admission, 72% were emergency admissions; 13% were urgent admissions; 10% were admissions of unknown types; 5% were elective admissions; and less than 1% were newborn admissions.

- TennCare covered the cost of health care services for 55% of youth treated for asthma in emergency room or inpatient settings. In the remaining 45% of cases, other payers covered the costs.

- Of the total cases of asthma for which a bill for treatment was issued, 77% were billed for emergency room treatment only, while 23% were billed for admission to hospital; 12% were billed for inpatient treatment admitted through the emergency room, and 11% were billed for inpatient treatment without being admitted through the emergency room.

- In 1998, 15,743 youth were given a primary diagnosis of asthma, and 8,463 were given a secondary diagnosis of asthma (i.e., asthma was a complication for another condition, such as pneumonia). The ratio of primary to secondary asthma diagnoses declined with increasing age. Younger children were more likely to be given a primary diagnosis of asthma over a secondary diagnosis: 0-4 year olds (1.85 primary diagnoses to every secondary diagnosis), 5-9 year olds (2.8 primary diagnoses to every secondary diagnosis), 10-14 year olds (2.5 primary diagnoses to every secondary diagnosis). In Tennessee in 1998, 1.23 youth aged 15-19 received a primary diagnosis of asthma for each youth aged 15-19 receiving a secondary diagnosis of asthma. For youth aged 20-21, the numbers of primary and secondary diagnoses were the same.

- Asthma patients in this hospital sample who were less than 15 years of age were 34% more likely to be male than female. This finding reversed for males and females aged 15-21, with a secondary diagnosis of asthma. Females who were 15-21 years of age appeared in the secondary diagnosis group twice as often as males.

[3]Data on asthma are provisional.

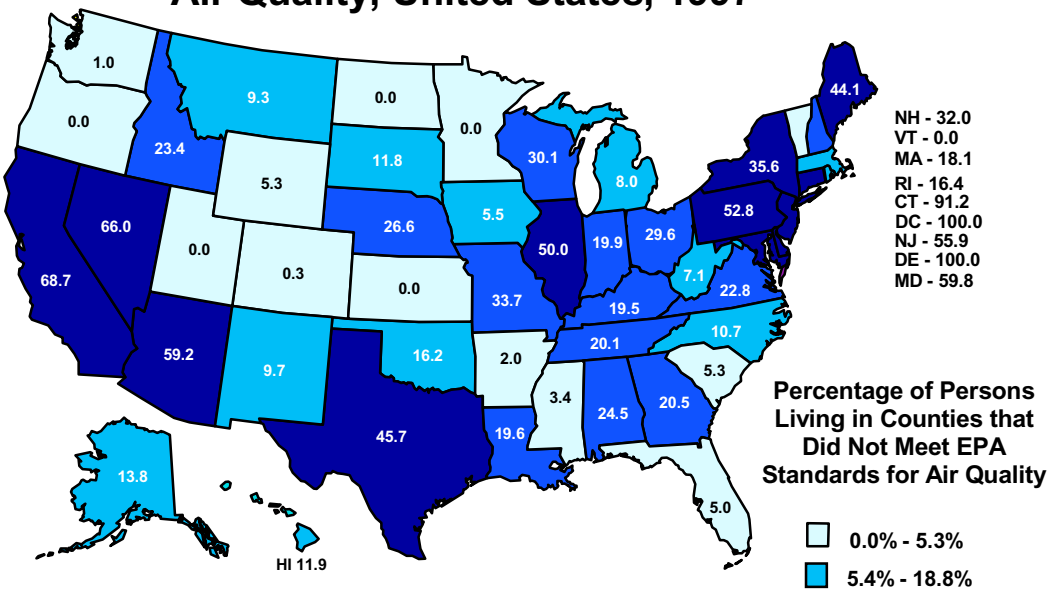
! Of youth treated for asthma in an emergency room or inpatient setting in Tennessee in 1998, 65% percent had a primary diagnosis of asthma, and 35% had a secondary diagnosis of asthma.

! For youth who had a primary diagnosis of asthma, 81% were treated in the emergency room; 12% percent were admitted to the hospital through the emergency room; and 7% were admitted to the hospital without going through the emergency room.

! For youth with a secondary diagnosis of asthma, 68% were treated in the emergency room; 13% were admitted to the hospital through the emergency room; and 19% were admitted to the hospital without going through the emergency room.

Source: Unpublished provisional data, as of June 6, 2000, from Tennessee Department of Health, Health Statistics and Research.

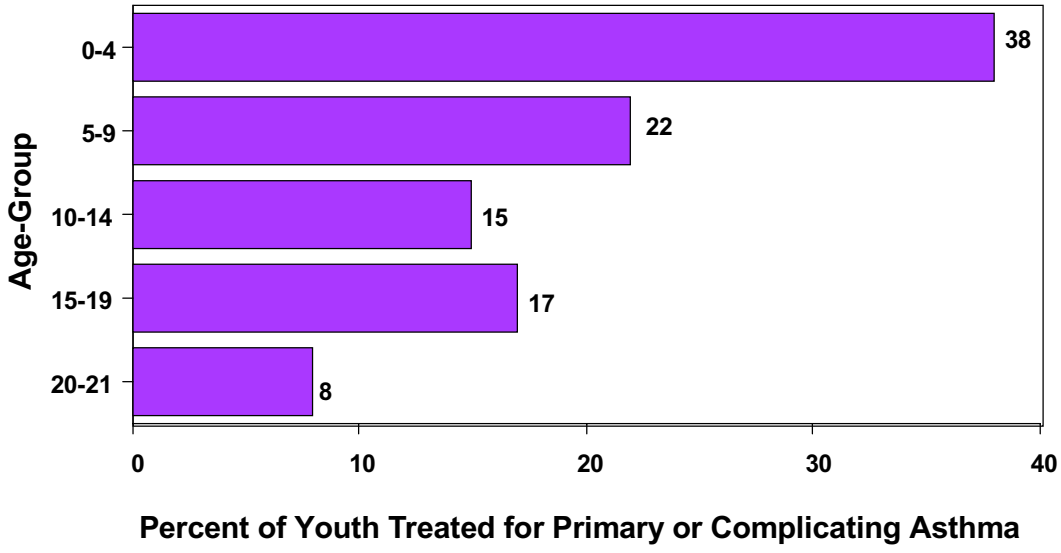
Air Quality Standards Measured by Percent of Persons Living in Counties Failing to Meet EPA Standards for Air Quality, United States, 1997



Tennessee - 20.1%; United States - 32.4%

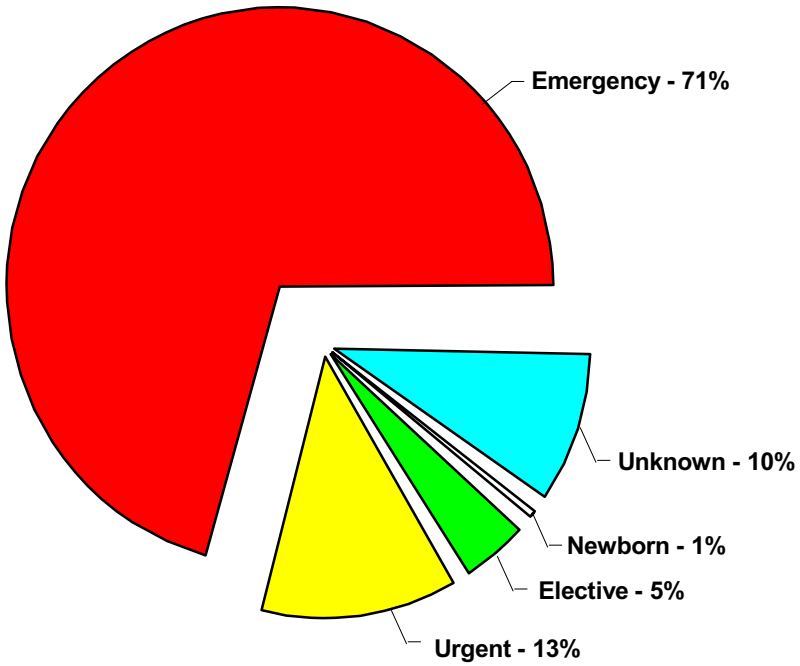
Source: Tennessee State Health Profile, 2000, CDC

Percent of Youth with Asthma Diagnoses Who Received Treatment by Age-Group, Based on Hospital Discharge Data, Tennessee, 1998



Source: Tennessee Hospital Discharge Provisional Data, Tennessee Department of Health, 1998.

Percent of Youth Asthma Hospital Discharges by Admission Type, Tennessee, 1998



Source: Tennessee Hospital Discharge Provisional Data, Tennessee Department of Health, 1998.

YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM (YRBSS) TENNESSEE HIGH SCHOOL STUDENT SURVEY, 1999

In the late 1980s, public health researchers at the Centers for Disease Control and Prevention (CDC) created the YRBSS to assess and follow trends in young peoples' health risk behaviors. In 1999, the Tennessee Department of Education administered the YRBSS to 1,519 students at 37 Tennessee public high schools. Response rates were 62% overall, with 74% of schools and 84% of students responding. These data are weighted and representative of Tennessee students in grades 9 through 12, although they do not include data from the Nashville School District. The sample was 49% female and 51% male, and the ethnic percentages for the sample were 75% white, 19% African-American, 2% Hispanic/Latino, 1.9% other races, and 1.4% multiple races.

Behaviors that Contribute to Unintentional Injuries

Seat Belt Use

! The percentage of Tennessee students who reported not using seatbelts in a motor vehicle has steadily decreased from 1993 (31%) to 1999 (22%). Males (27%) were much more likely not to wear a seatbelt than were females (16%). Compared to data for the 1999 United States YRBSS, a higher percentage of Tennessee students did not wear seatbelts. Tennessee students were 38% more likely not to wear seatbelts than their U.S. counterparts (16%).

Motorcycle Helmet Use

! In Tennessee in 1999, 35% of students had ridden a motorcycle in the past twelve months and rarely or never wore a helmet. Tennessee's percentage was slightly lower than that for the U.S. (38%) and has remained constant since 1995. This type of behavior was twice as common among males (41%) as females (20%).

Bicycle Helmet Use

! Helmet use was rare when students were riding bicycles. In Tennessee, 92% of students did not wear helmets when operating a bicycle in the past 12 months, compared to 85% nationwide. There were no differences by gender or across grade levels.

Injuries While Physically Active

! Thirty-three percent of Tennessee students sustained an injury requiring medical attention while participating in a sport or physical activity. This was somewhat lower than the prevalence for students nationwide (38%). It was more common among males (39%) than females (27%).

Drinking and Driving

! In 1999, 32% of students in Tennessee and 33% nationally reported that within the past thirty days, they rode one or more times in a car operated by someone who had been drinking alcohol. Percentages for males (32%) and females (31%) did not differ significantly.

! Fourteen percent of students had driven a car or other vehicle while or after drinking alcohol one or more times in the past 30 days. Males (17%) were more likely to report this activity than were females (11%). The percentages of students who had recently operated a vehicle while or after drinking alcohol increased by grade-level, from 9% of 9th graders to 22% of 12th graders. (This is partly attributable to increased exposure to driving with students' age). Tennessee was 8% above the percentage for the national student population (13%) in 1999.

Behaviors that Contribute to Intentional Injuries

Physical Fighting

! In 1999, 31% of students had been in a physical fight in the past twelve months, and 13% of student respondents reported that they had been in a physical fight on school property. Males (39%) were more likely to have been in physical fights than were females (22%). Students in the 9th (36%) and 10th (35%) grades were more likely to have been fighting than 11th (26%) and 12th graders (24%). The 1999 national YRBSS reports that 36% of students had been in a physical fight within twelve months of being surveyed, a somewhat higher prevalence than for Tennessee.

! The percentage of Tennessee students who were seriously injured (requiring medical attention) one or more times in a physical fight in the previous 12 months was 3.2%. Nationally the percentage was 4%. In Tennessee, more males (4.6%) were injured in this way than females (1.8%). The highest prevalence of injury was observed among 9th graders (3.9%) declining to 2.6% among 12th graders.

Weapon Carrying

! In Tennessee, 22% of students had carried a weapon in the previous 30 days, compared to 17% in the U.S. There was significant gender disparity in the percentage of Tennessee students who had carried a weapon -- e.g., a gun, a knife, or a club -- on one or more of the past 30 days; prevalence among males was 36% and among females, 6.9%.

! Almost seven percent of students (6.7%) had carried a gun on one or more of the past 30 days. Males (12%) did this much more frequently than females (1.5%) in Tennessee. Nationally, fewer students (4.9%) had carried a gun.

School Safety and Weapons

! Of the Tennessee student respondents, 8.1% (14% of males and 2.4% of females) had carried a weapon *to school*, compared to 6.9% nationwide. The prevalence increased from 6.2% among 9th graders to 8.4% among 10th graders, 7.8% among 11th graders and 9.9% among 12th graders.

! Being threatened or injured with a weapon on school property during the preceding twelve months was much more common for males (12%) than for females (5%), with an overall prevalence of 8.6% of Tennessee students.

! During the preceding 30 days, 3.9% of students in Tennessee and 5.2% of students nationwide did not attend school because they felt unsafe either at school or en route to or from school. Males (3.5%) and females (4.4%) did not show significant differences. The highest prevalence of missed school because of perceived safety threats was observed among students in the 12th grade (5.3%).

Violence in Relationships

! Ten percent of both male and female students had been intentionally hit, slapped, or physically hurt by a boyfriend or girlfriend during the previous 12 months in Tennessee, compared to 8.8% in the U.S. No gender differences were observed, but 11th graders (7.3%) showed the lowest percentage of being physically hurt and 12th graders (17%), the highest. Ninth (9.9%) and 10th (8.4%) graders fell in the middle range.

Forced Sexual Intercourse

! Eight percent of Tennessee students reported that at some time they had been forced to have sexual intercourse, close to the U.S. prevalence of 8.8%. Females (11.5%) reported unwanted sexual intercourse significantly more often than males (4.6%). The proportion of students reporting unwanted sexual intercourse increased by grade-level, from 4.8% among 9th graders to 11% among 12th graders.

Depression, Suicidal Ideation, Planning, and Attempts

! In both Tennessee and nationwide, 28% of high school students reported that they had feelings of sadness or hopelessness almost everyday for two or more consecutive weeks, and that these feelings caused them to stop doing some of their usual activities. These feelings were much more prevalent among females (36%) than among males (19.5%).

! Suicidal ideation among high school students has declined since 1995, from 22% to 17% in 1999. In the U.S. in 1999, 19% of students had considered attempting suicide within the past twelve months. In Tennessee, suicidal ideation was much

more prevalent among females (23%) compared with males (11%). In addition, white students (19%) were more than twice as likely to be considering suicide as African-American students (9%).

! Thirteen percent of students had planned a suicide attempt within the previous 12 months. This is 10% below the 1999 national prevalence (14.5%) and 24% less than the Tennessee percentage in 1995 (17%). In 1999 in Tennessee, females (16%) were more likely to have planned a suicide attempt than were males (9.9%). White students (19%) were about twice as likely to have planned a suicide attempt than were African-American students (9.1%).

! In Tennessee, 7.5% of students had actually attempted suicide one or more times during the preceding year compared to 8.3% nationwide. In 1999, Tennessee females (10%) were more likely to have made suicide attempts when compared with males (5.2%). The prevalence of this reported behavior has remained stable since 1995.

! Two-and-one-half percent of students had injured or poisoned themselves or overdosed during their suicide attempt and required medical care. The percentages of students requiring such medical treatment were similar for males and females (2.3% and 2.7%, respectively). These data are in line with the 1999 national percentage (2.6%).

Youth Alcohol, Tobacco, and Other Drug Use, 1999, YRBSS

Tobacco, Alcohol, and Other Drugs on School Property

! In 1999, in Tennessee and nationwide, 14% of students had smoked on school property within the past 30 days, down from 15% in 1997. Males (15%) had more frequently smoked on school grounds than females (12%).

! Overall, 4% of students (6% of males and 2% of females) had drunk alcohol on school property in the past 30 days in Tennessee. The prevalence for the U.S. is 4.9%.

! In the preceding 30 days, 4% of students reported using marijuana on school grounds -- males (6%), at twice the prevalence of females (3%). Nationally, 7.2% of students reported this behavior.

! In 1999, 25% of Tennessee students, compared to 30.2% in the U.S., were offered, sold, or given illegal drugs on school property in the preceding 12 months. Males (31%) were more often involved in illegal drug distribution and sales activities than females (19%).

Tobacco Use

Cigarette Use

- In 1999, 73% of Tennessee high school students and 70% of high school students nationwide had tried smoking a cigarette during their lifetimes. A slightly higher percentage of males (75%) had tried smoking compared with females (72%). The 1999 prevalence is similar to that in 1995, 75%.

- Of the total Tennessee student respondents, 38% had smoked cigarettes in the previous 30 days, while the national percentage was 35%. By gender, 39% of males and 36% of females had smoked in the past 30 days. African-American students (22%) had recently smoked in approximately half the proportion of white students (41%). By grade-level, a steady increase was observed in the percentage of respondents who reported recent smoking: 9th graders, 33%; 10th graders, 38%; 11th graders, 38%; 12th graders, 42%.

- Twenty percent of Tennessee students had smoked on at least 20 or more of the past 30 days, compared to 17% nationally. While males (19%) and females (20%) did not differ significantly in recent frequent smoking. However, nearly four times more white students (23%) than African-American students (6%) reported recent frequent smoking.

- Twelve percent of students had purchased cigarettes at a store or gas station within the past 30 days (15% of males and 8.3% of females). This is a significant drop from the 1995 figure of 42%. Twelfth graders were much more likely to purchase cigarettes than other students (26%, compared to 13% of 11th graders, 8.4% of 10th graders, and 3.5% of 9th graders).

- Of those students below the legal age to purchase tobacco, 20% were able to purchase cigarettes at a business establishment. Nationally, 23.5% of students reported purchasing their own cigarettes in a store or gas station. Male students (27%) in Tennessee did so with greater frequency than females (12%). More than twice as many older students (aged 16 or 17) (24%) did so than younger students (aged 15 or under) (10%).

- Ten percent of students had purchased cigarettes in a store or gas station within the past 30 days, and were not asked to show proof of age. For students who were habitual smokers, 70% had purchased their own cigarettes without being asked for proof of age.

- In 1999, the total percentage of students who were, or had ever been, regular cigarette smokers (at least one cigarette per day for 30 days) was 28%. White students (32%) were three times more likely to be, or to have been, regular cigarette smokers than African-American students (10%), with no gender differences.

! Finally, 38% of Tennessee students have tried, at some time, to quit smoking cigarettes, a prevalence similar to that for the U.S. Similar proportions of male and female students have tried quitting smoking.

Cigars, Cigarillos, or Little Cigars

! On one or more of the 30 days preceding the survey, 22% of Tennessee students had smoked at least one cigar, cigarillo, or little cigar, compared to 18% nationally. More than twice as many males (30%) had used these tobacco products than females (13%). A lower percentage of 9th graders (18%) had used these products than other students (23%-25%).

Chewing Tobacco or Snuff Use

! In 1999, 14% of students had used chewing tobacco or snuff at least once in the past 30 days, and 9% had used smokeless tobacco on school grounds within the past 30 days. The 30-day rate for smokeless tobacco use was significantly higher for males (24%) than for females (2.4%), for whites (16%) than African-Americans (2.4%), and for 12th graders (18%) than other students (11%-14%). Tennessee students used smokeless tobacco at almost twice the rate of students in the nation (7.8%).

Early Introduction to Tobacco, Alcohol, and Other Drugs

! In 1999, 30% of students reported that, before age 13, they had smoked a whole cigarette, compared to 25% of students nationwide. In Tennessee, a higher percentage of males (35%) had tried smoking at an early age compared with females (24%). There are also differences in percentages by race/ethnicity. Seventeen percent of African-American students reported trying smoking before age 13, compared with 32% of white respondents.

! Twenty-eight percent of students had their first drink of alcohol (more than just a "taste") before age 13. The proportion of males (33%) was higher than females (22%). Nationally, the percentage of students reporting early introduction to alcohol is 32%.

! In both the nation and in Tennessee, 11% of students had tried marijuana by age 13. Sixteen percent of males, and 7% of females, reported early marijuana use in Tennessee in 1999.

Alcohol Use and Heavy/Binge Drinking

! The lifetime prevalence of alcohol use among Tennessee high school students in 1999 was 76%. This Tennessee percentage is 6% lower than that for the nation (81%). Males (76%) and females (77%) did not differ significantly in lifetime alcohol use.

! Within the previous 30 days, 45% of students in Tennessee drank alcohol (one or more drinks) on at least a single occasion compared to 50% of students nationwide. A slightly higher proportion of males (47%) than females (43%) had consumed alcohol in the past 30 days. A lower percentage of African-American students (38%) had drunk alcohol than white students (46%) in that period. The 30-day prevalence of drinking alcohol increases by grade level, from 40% among 9th graders to 49% among 12th graders.

! Twenty-nine percent of Tennessee students and 31.5% of U.S. students reported heavy, or binge, drinking within 30 days of being surveyed. These heavy drinking students reported that they had consumed at least five or more drinks of alcohol on a single occasion in the past 30 days. Males (34%) were more likely to have drunk heavily than were females (23%). The data suggest a steady increase in binge drinking as grade-level increases, with the most significant differences appearing when students in the 9th (24%) and 10th (26%) grades were compared with students in the 11th (32%) and the 12th (34%) grades. Binge drinking was uncommon among African-American females (10%) when they were compared with other race-gender groups: African-American males (20%), white males (36%), and white females (27%).

Marijuana Use

! The lifetime prevalence of marijuana use among Tennessee students is 47%. More males (51%) have tried marijuana than females (43%). The lifetime prevalence for marijuana use increases by grade-level: 9th, 36%; 10th, 50%; 11th, 53%; 12th, 54%.

! In 1999, 27% percent of students, both in Tennessee and the U.S. reported that they had used marijuana within the past 30-day. Marijuana use was more prevalent among Tennessee males (31%) than females (22%). By race/ethnicity, 30-day marijuana use rates were higher among African-American students (33%) compared with white students (25%).

Cocaine Use

! Ten percent of students reported using powder, freebase, or crack cocaine during their lifetimes. This is up from the 1997 YRBSS percentage of 7% and the 1995 percentage of 5.9%. In terms of students' lifetime prevalence of cocaine use, more males (12%) than females (7%) had used various forms of the drug. Lifetime prevalence for Tennessee students is approximately the same as the prevalence for the nation (9.5%).

! Approximately four percent of respondents (3.8%) reported that they had used cocaine within 30 days of the survey. Five percent of total male respondents

reported recent cocaine use, and 3% of female respondents reported recent cocaine use.

Other Drug Use

! Nineteen percent of Tennessee students reported that at some time in their lives they had inhaled fumes from glue, aerosol spray cans, or other paints and sprays, and that by inhaling these fumes, they intended to become intoxicated. In 1997, this percentage was 22%. Twenty percent of males and 18% of females reported engaging in this activity. The use of inhalants was more prevalent among white students (22%) than African-American students (7%).

! In the past 30 days, 5% of students in Tennessee had abused inhalants, while the nationwide percentage was 4.2%. Among Tennessee respondents, 6% of males and 4% of females had abused inhalants.

! The Tennessee student lifetime prevalence of heroin use is 2.2% compared to 2.4% nationwide. Three percent of males and 1.5% of females reported using the drug in Tennessee.

! Lifetime methamphetamine use for Tennessee high school students was 10% in 1999 and did not differ significantly by gender. Methamphetamine use was four times higher among white students (12%) than among African-American students (3%). The national lifetime prevalence is 9.1%.

! Approximately six percent of high school students (5.6%) claimed to have abused orally-ingested or injected steroids at some time in their lives, with little change in 1999 from the 1997 (6%) and 1995 (5%) rates. Significantly more males (8.1%) than females (3%) illegally used steroids. Nationally, in 1999, 3.7% of students had used illegal steroids.

! About 2.2% of Tennessee students have used a needle to inject an illegal drug into their bodies. This percentage is comparable to the national YRBSS percentage of 1.8%. Among Tennessee high school students in 1999, 3% of males and 1% of females reported intravenous drug use during their lifetimes.

Activities to Maintain Tennessee High School Students' Health

Physical Activity

! In 1999, 63% of Tennessee high school students and 65% of those in the U.S. participated in strenuous physical activities for at least 20 minutes three or more times a week. Participants were more frequently males (74%) than females (53%). Percentages of respondents participating in regular strenuous physical activity declined by grade-level. Older students tended to be more sedentary, with lower rates of regular strenuous exercise, than younger students. Respective prevalence

by grade level is: 9th graders, 73%; 10th graders, 65%; 11th graders, 58%; and 12th graders, 56%.

! Twenty-three percent of students in Tennessee, and 27% of students in the U.S., participated in physical activities for at least 30 minutes per day, five or more days a week, and these activities did *not* cause them to sweat or to breathe hard. In Tennessee, 27% of male students and 18% of female students regularly participated in such moderate physical activity.

! More than half (51%) of students engaged in physical exercise for strengthening or toning muscles three or more days a week: 63% of males and 39% of females participated in this type of activity. The Tennessee rate was slightly lower than that for the U.S. of 54%.

! In Tennessee and in the U.S., on an average 1999 school day, 57% of students watched two hours or less of TV. By gender, 55% of males and 58% of females watched two hours or less of TV. Older students tended to watch less TV than younger students.

! Of the students surveyed, 34% overall -- 40% of males and 27% of females -- attended physical education classes on one or more days during the school week. In the U.S., this percentage was significantly higher, 56% of students being enrolled in a physical education class. Tennessee 9th graders had the highest prevalence (62%) among all grade levels (16%-25% was the prevalence for other grades).

! The proportion of students who attended a physical education class daily was 23% in Tennessee and 29% nationwide. Twenty-seven percent of males and 18% of females were participating in daily physical education. Ninth graders (45%) were the group most involved in daily physical education, and this percentage steeply declines in subsequent grade-levels: 10th (16%), 11th (13%), and 12th (9%).

! In Tennessee, 51% of students had played on one or more sports teams during the past 12 months, compared to 56% of students nationwide. Of the total student respondents, 59% of males and 42% of females participated in group sports activities.

! Sports and exercise-related injuries in the past 12 months that required medical attention affected 33% of students. Thirty-nine percent of males were affected by serious physical activity-related injuries, whereas 27% percent of females were so affected.

Diet and Nutrition

! In the week prior to being surveyed, 81% of students had consumed fruit one or more times. More males (84%) had consumed fruit than females (78%).

- Of the overall student sample, 62% had eaten green salad one or more times during the past 7 days. Males (58%) were less likely to have eaten salad than females (65%). African-American students (46%) were less likely than white students (65%) to have eaten green salad in the past week.

- Forty-two percent of students ate carrots one or more times in the preceding week. Forty-three percent of males and 40% of females had eaten carrots. African-American (27%) and white (45%) students differed significantly on 7-day rates for having eaten carrots.

- In 1999, only 18% of students had eaten more than four servings of fruit per day in the preceding seven days. Twenty percent of males and 17% of females ate fruit regularly. Also, higher percentages of African-American students (24%) ate fruit than did white students (16%).

- The 7-day consumption rates for three or more glasses of milk a day was, overall, 16%. Twenty-two percent of males and 11% of females drank three or more glasses of milk a day during the seven days preceding the survey.

Dieting and Perceptions of Body Weight among Tennessee High School Students

- In 1999, Tennessee's YRBSS found that 18% of high school students were at risk for becoming overweight. Males (21%) were more likely to be at risk for being overweight than were females (14%).

- Twelve percent of students (15% of males and 9% of females), were designated as overweight (at or above the 95th percentile for body mass index by age and gender).

- Concerning students' perceptions of their own bodies, 32% of students designated themselves as slightly or very overweight. Females (39%) were much more likely to make this designation than were males (25%). Ninth graders (28%) were least likely to perceive themselves as overweight, while 12th graders (36%) were most likely to do so.

- Forty-three percent of students were trying to lose weight in 1999. More than twice the percentage of females (60%) than males (27%) were trying to lose weight.

- During the 30 days preceding the survey, 58% of students reported that they had exercised to lose weight or to keep from gaining weight. Fifty percent of males and 66% of females reported exercising to lose or maintain weight.

- Forty percent of students ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight in the past 30 days. Females (57%) were much more likely to alter their dietary habits to lose weight than males (23%).

- Thirteen percent of students went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days. Eight percent of males and 19% of females reported this behavior.

- Of the total respondent group, 9% reported that they had taken diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days. Five percent of males and 14% of females reported this behavior. Thirteen percent of 12th graders, compared to 8%-9% of students in other grades, reported this behavior.

- During the 30 days preceding the survey, 4.6% of students reported that they had taken laxatives or vomited to keep from gaining weight or to lose weight. Females (7.9%) were much more likely to report this behavior than males (1.5%). White students (5.1%) were more likely to use these means of weight control than were African-American students (1.4%). Ninth graders (7.3%) showed the highest prevalence, with 12th graders at 2.3%.

Students' Sexual Behaviors Contributing to Unintended Pregnancy and STDs

- Of the total student respondent group, 52% of both males and females had engaged in sexual intercourse during their lifetimes. In the U.S., the prevalence was 50%. The lifetime prevalence for students had stabilized in 1999, after it dropped notably from 1993 (62%), and 1995 (61%), to 1997 (53%). Ninth graders (37%) had the lowest proportion of students who had engaged in sexual intercourse. This proportion increased for 10th (51%), 11th (57%), and 12th (71%) graders. African-American students (72%) had higher lifetime prevalence of sexual intercourse than white students (47%).

- In Tennessee, 8.9% of students had sexual intercourse before age 13, compared to 8.3% nationwide in 1999. The proportion of males (13%) was higher than the proportion of females (4.6%). African-American students (17%) were more likely to report having sexual intercourse before age 13 than were white students (6.1%).

- Nineteen percent of students in Tennessee, and 16% of students nationwide, reported that they had been with four or more sexual partners since they began having sexual intercourse. More males (22%) than females (17%) reported having been with four or more sexual partners. The percentages increased by grade level from 12% among 9th graders to 27% among 12th graders. A higher proportion of African-American students (31%) than white students (15%) reported four or more sexual partners.

- Among student respondents in Tennessee, 40% reported having sexual intercourse with one or more partners in the past 3 months, compared to 36% nationwide. Tennessee females (42%) reported this behavior more often than males (38%), as did African-American students (54%) than whites (36%). Ninth graders (26%) were

least likely to report this behavior, with increasing percentages of 10th (34%), 11th (46%), and 12th (60%) graders reporting recent sexual intercourse.

! Among the group of students in Tennessee and the U.S. who had engaged in sexual intercourse within the past three months, one quarter had drunk alcohol or used drugs before their most recent sexual intercourse. Male students (34%) reported using alcohol or other drugs before intercourse more often than female students (17%). Ninth graders were more likely to use alcohol or other drugs before sexual intercourse than students in higher grades; for example, 20% of 12th graders, compared to 25% of 9th graders, reported this behavior.

! In 1999, 90% of Tennessee high school students had been taught about AIDS or HIV infection in school. Percentages are consistent by gender and grade-level. However, fewer African-American students (84%) had learned about AIDS or HIV infection in school compared with white students (92%).

Students Use of Birth Control

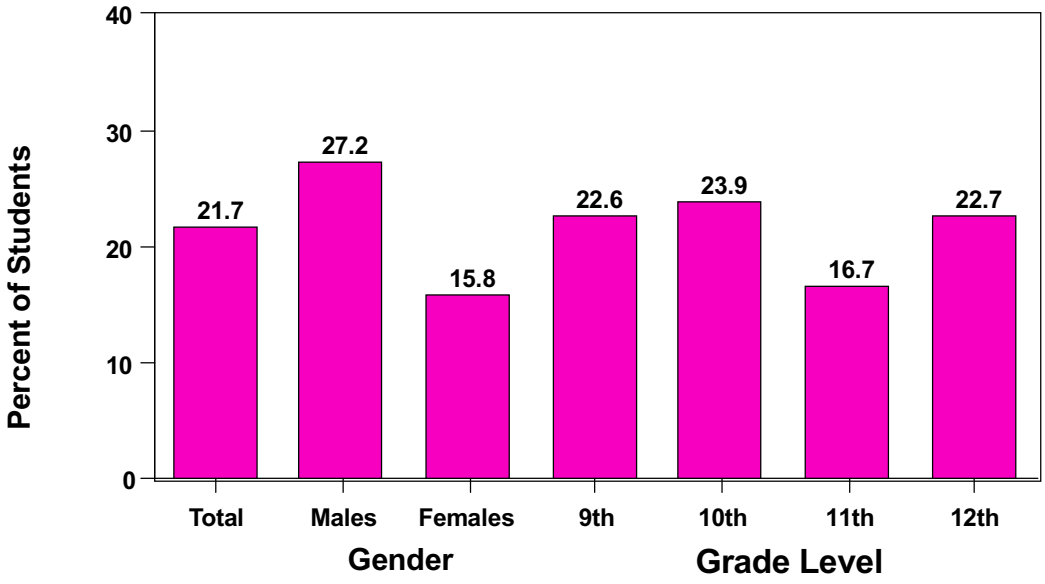
! Among the Tennessee students who had sexual intercourse in the preceding 3 months, 52% used a condom, compared to 58% nationally. Males (58%) reported using condoms during their last sexual intercourse more often than females (48%), and African-American students (68%) more than white students (48%). Students in higher grades were less likely to use condoms during their most recent sexual intercourse (60% of 9th graders compared to 47% of 12th graders).

! Of the Tennessee and U.S. students who had sexual intercourse during the past three months, 16% reported that birth control pills were being used by female partners during their last sexual intercourse. Fewer males (12%) reported use of birth control by female partners than females (20%) reported. In addition, African-American students (8.9%) were less likely to use birth control pills than were white students (19%), and younger than older students.

! The lifetime prevalence of students who had been pregnant or who had gotten someone pregnant one or more times was 5.8%. This prevalence is lower in Tennessee than in the U.S. in 1999 (6.3%). Three-and-a-half percent of males reported getting a female partner pregnant, whereas 8.3% of female students reported having had a pregnancy.

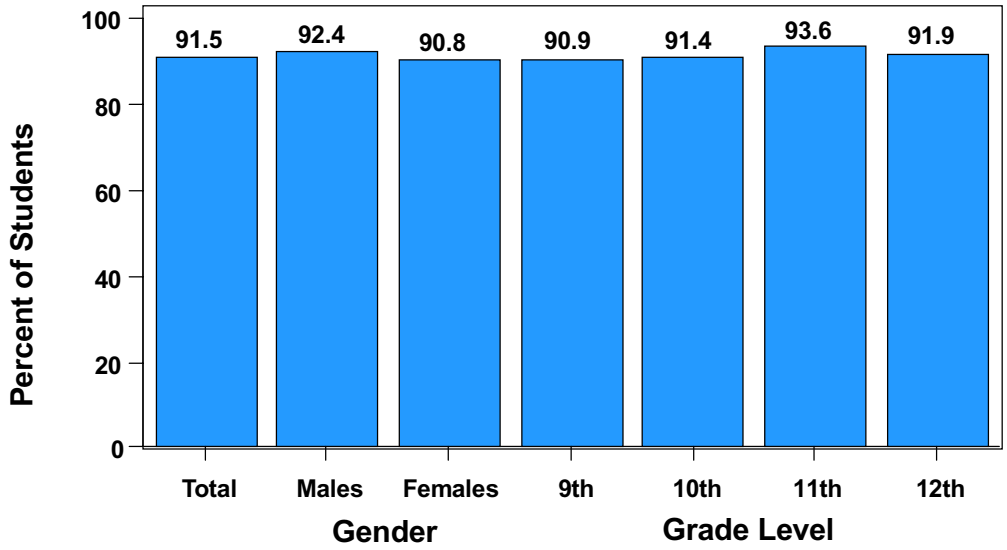
Source: State of Tennessee: Youth Risk Behavior Surveillance System, Tennessee Department of Health, 1993-1999 (excluding Nashville); National: Youth Risk Behavior Surveillance System, CDC, 1999.

Percent of Students Who Never or Rarely Wore a Seat Belt While Riding in a Car Driven by Someone Else, Tennessee, 1999



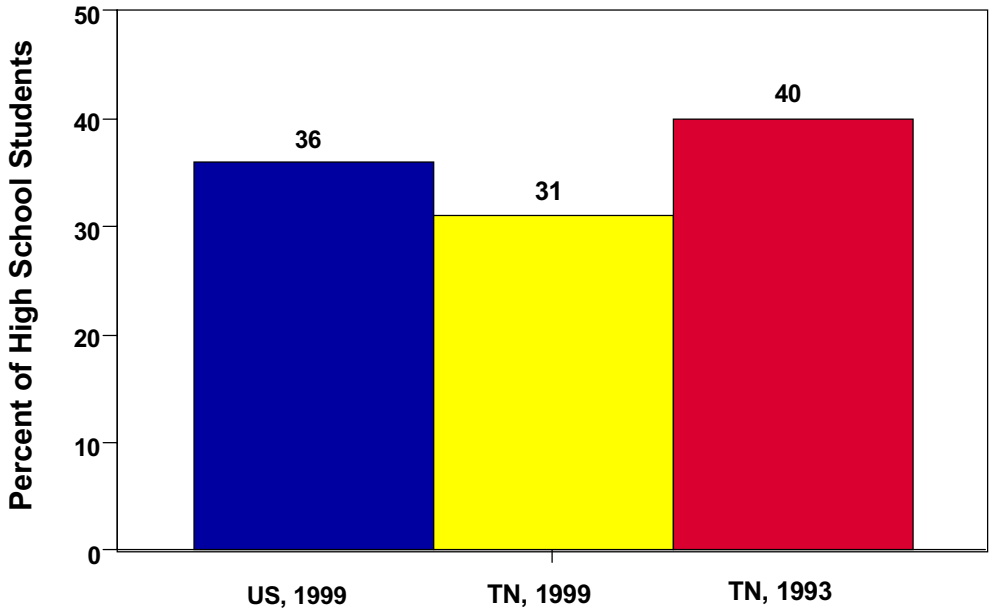
Source: 1999 Tennessee (Excluding Nashville) YRBSS Results - Q9 - Weighted, Tennessee Department of Education.

Percent of Students Who Never or Rarely Wore a Bicycle Helmet While Riding a Bicycle During the Past 12 Months, Tennessee, 1999



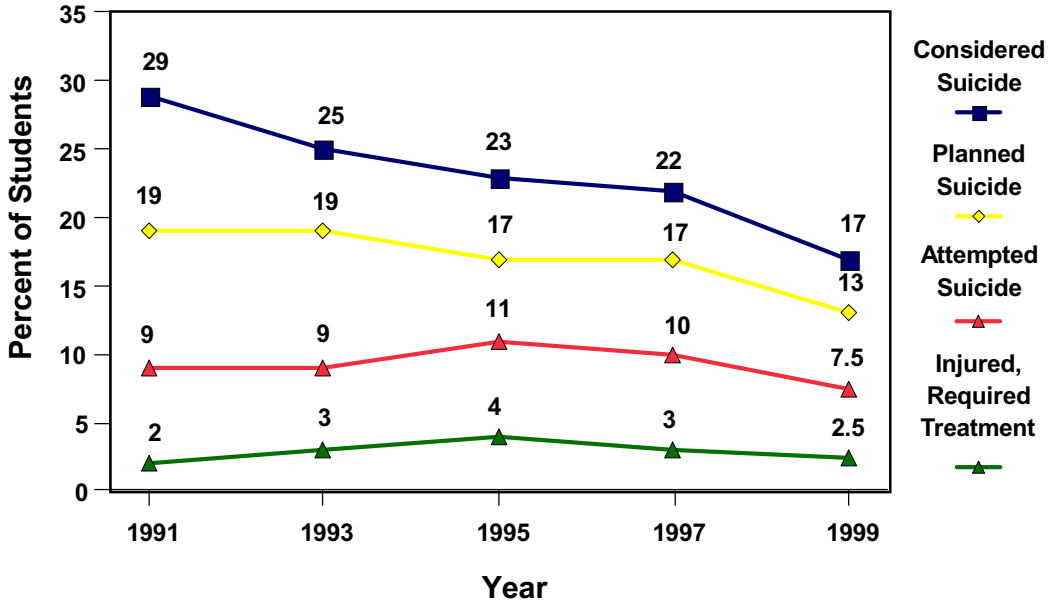
Source: 1999 Tennessee (Excluding Nashville) YRBSS Results - Q8 - Weighted, Tennessee Department of Education.

Percent of Students Who Engaged in a Physical Fight in the Past Twelve Months, United States and Tennessee, 1999 and 1993



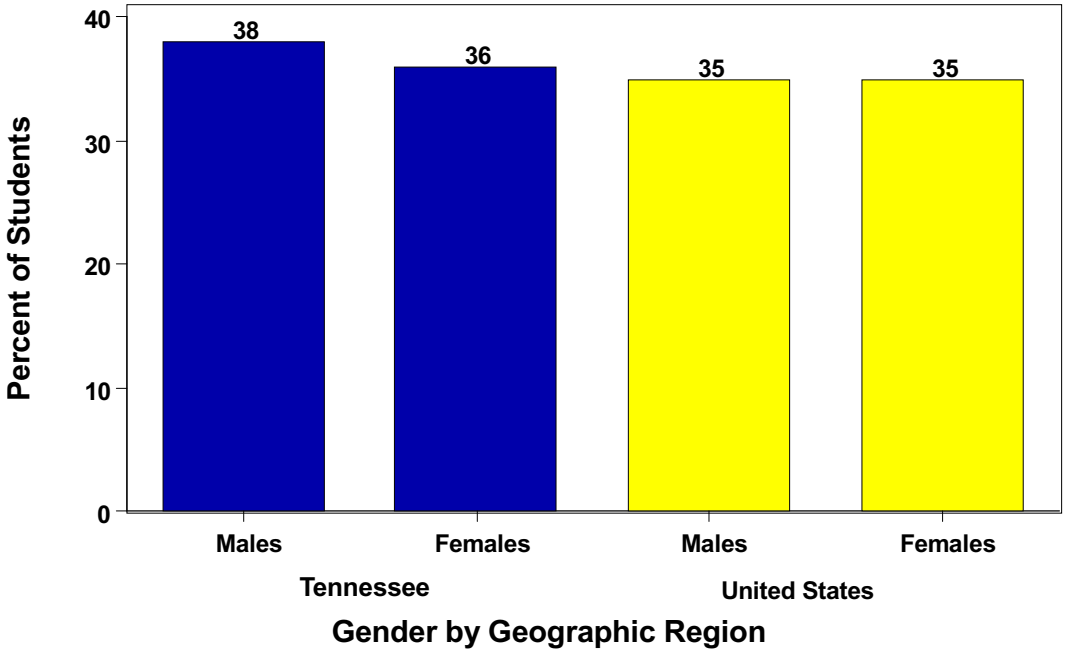
Note: YRBSS, Tennessee, 1999, 1993, data are weighted.
Source: YRBSS, US, 1999; YRBSS, Tennessee, 1999, 1993, Tennessee Department of Health.

Changes in Suicidal Ideation and Behavior During the Past 12 Months among Tennessee High School Students, 1991-1999



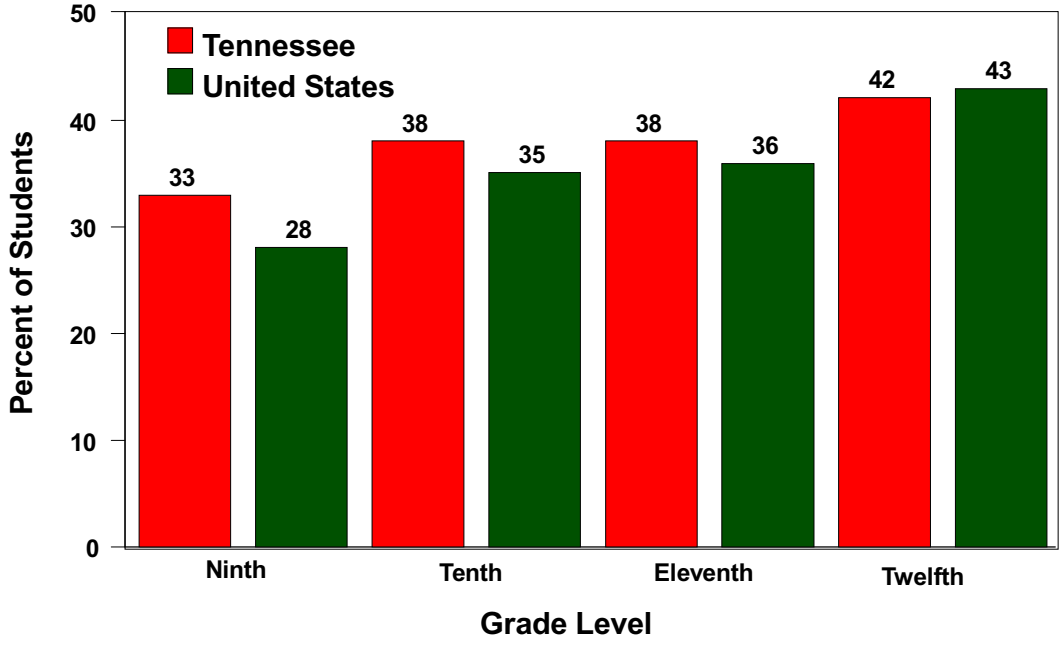
Note: Date are unweighted for 1991, 1995 and 1997.
Source: YRBSS, Tennessee, 1991-1999; Tennessee Department of Education.

30-Day Prevalence of Cigarette Smoking among High School Students by Gender, YRBSS, 1999: Tennessee and the United States



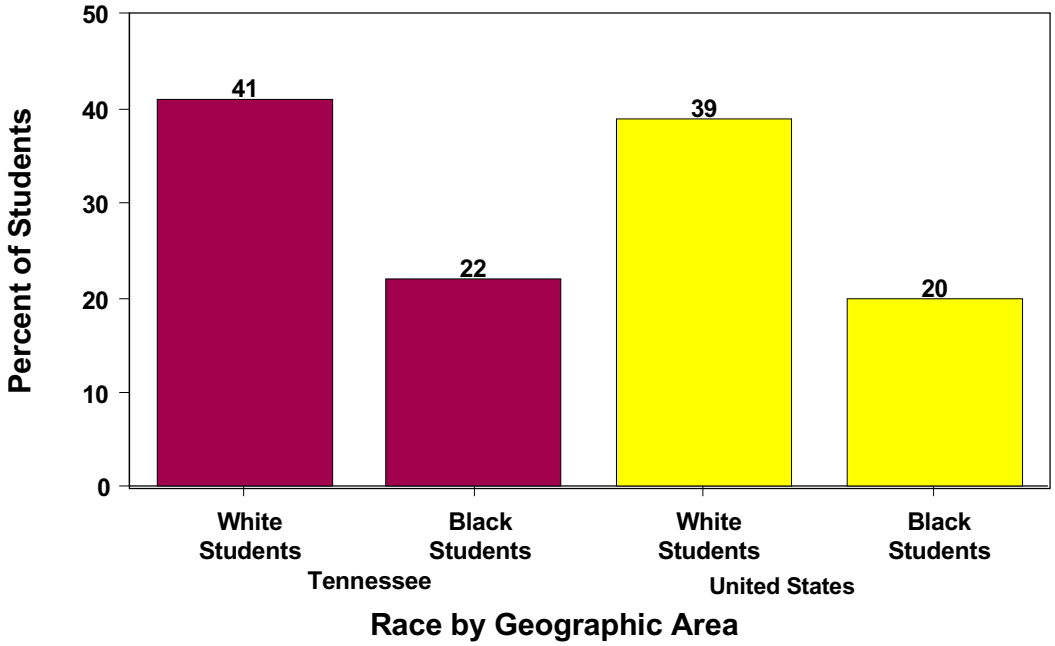
Source: US YRBSS, 1999, CDC; Tennessee YRBSS, 1999; Tennessee Department of Education.

30-Day Prevalence of Cigarette Smoking among High School Students by Grade-Level, YRBSS, 1999: Tennessee and the United States



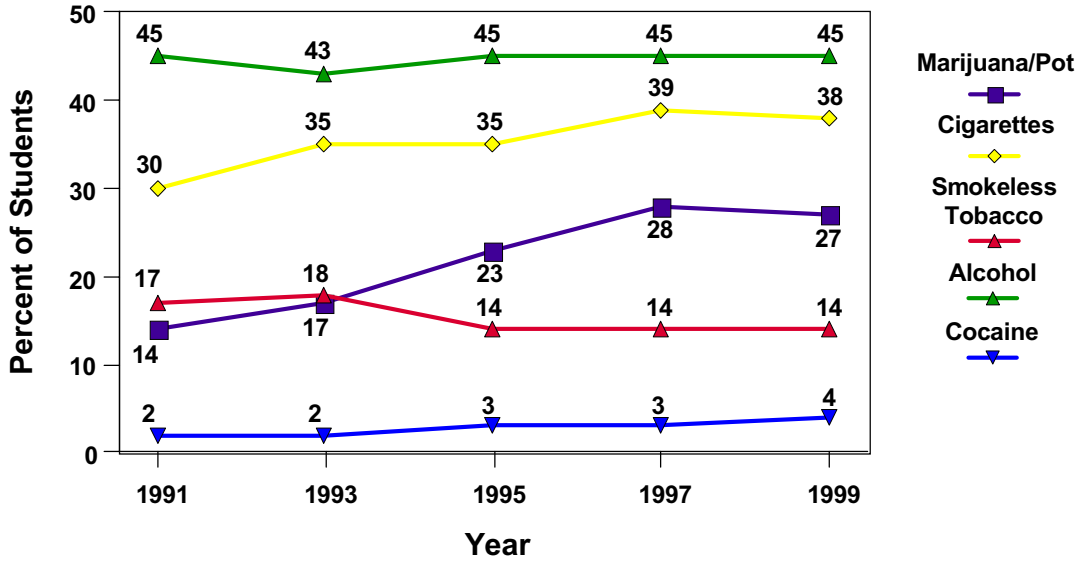
Source: US YRBSS, 1999, CDC; Tennessee YRBSS, 1999; Tennessee Department of Education.

30-Day Prevalence of Cigarette Smoking among High School Students by Race, YRBSS, 1999: Tennessee and the United States



Source: US YRBSS, 1999, CDC; Tennessee YRBSS, 1999; Tennessee Department of Education

Time Trends in Percent of Students Using Tobacco, Alcohol and Other Drugs in the Past Thirty Days, Tennessee, 1991-99, YRBSS



Note: Data for 1991, 1995 and 1997 are not weighted.
Source: YRBSS, Tennessee, 1991-1999; Tennessee Department of Education.

SCHOOL HEALTH, TENNESSEE, 1993-1994 to 1998-1999

The Prevalence of Disabilities among Students

! Of 892,270 students in Tennessee schools in school year 1998-99 (estimated by average daily membership), close to one in 13 was learning disabled. A total of 70,703 students were learning disabled in Tennessee in 1998-99.

! Counties with the highest prevalence of learning-disabled students in 1998-99 were Grundy and Union Counties, at 21.3% and 18.8%, respectively, compared to 7.9% of students in Tennessee. Haywood and Rhea Counties had the lowest percentages of learning-disabled students, at 2.9% and 4.4%, respectively.

! The prevalence of students with conditions making them eligible for school-based special education services in 1998-99 is as follows:

- 7.9% were learning disabled
- 4.6% were speech- or language-impaired
- 2.5% were mentally retarded or emotionally disturbed
- 2.1% were gifted
- 1.5% were health-impaired or physically impaired
- 0.3% were hearing-impaired and/or visually impaired and
- 1.3% were other disabilities[4].

! From 1993-94 to 1998-99, percentages of students in each disability category have remained virtually unchanged, with the exception of the percentage of students who are health-impaired or physically impaired. This category of disability has risen by about one-third, from about 1% of students in 1993-94 to 1.5% of students in 1998-99. While this represents a relatively small percentage of students, the increase is of concern.

! In Tennessee in 1998-99,13,477 or 1.5% of school children were health-impaired or physically impaired.

! The highest percentages of students who were health-impaired or physically impaired attended schools in Warren County (4.0%), followed by Wilson County and Cannon County, both with 2.7%. Knox County ranked fourth with 2.6%. The lowest percentages of health-impaired students were in Lake County (0.31%) and Clay County (0.2%).

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[4]These categories are taken directly from data provided by the Tennessee Department of Education at www.state.tn.us/education, and they are used uncritically and nonpejoratively here. Definitions are available at http:/web.utk.edu/~chrg/definitions.pdf.

! Metropolitan regions had slightly higher percentages of health-impaired students than non-metropolitan regions (1.6% compared to 1.5%, respectively). Among metropolitan regions, Knox County (2.6%) had the highest prevalence, while Upper Cumberland had the highest prevalence of health-impaired students among non-metropolitan regions (1.9%).

Special Education Services for Disability

! In Tennessee, one in five students in grades K-12 received special education services (this includes gifted students as well as those with disabilities). In 1998-1999, 179,917 students received these services in Tennessee schools.

! The percentage of students receiving special education services has remained relatively stable at 19%-20% from 1993-94 to 1998-99.

! The highest percentage of Tennessee students receiving special education services were learning disabled -- 39.3%. The second highest percentage were those with speech impairment at 15.4%.

! Gifted and mentally retarded students represented 10.3% and 10.2%, respectively, of students receiving special education services[5], while language-impaired students made up 7.6% of special education students in Tennessee in 1998-99.

! Nearly 7% of special education students (6.6%) were health-impaired; 2.5% were emotionally disturbed; and 2.3% were functionally delayed.

! About 1% of special education students were multi-disabled (1.1%) or developmentally delayed (1.9%), or physically impaired (0.9%).

! Less than 1% of students receiving special education services were autistic (0.5%), deaf (0.1%), hearing impaired (0.7%), blind (0.1%), visually impaired (0.4%) or traumatic brain injured (0.2%).

! Counties with the highest percentage of students receiving special education services who are learning disabled were Union and Grundy Counties at 62.8% and 60.9% of students, respectively. The statewide average was 39.3% of students. Counties with the lowest prevalence were Lauderdale and Haywood, at 21.9% and 17.2%, respectively.

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[5]The definitions of “gifted,” “mentally retarded,” and “developmentally delayed,” among other terms, are set by the Tennessee Department of Education; different terms may be used by other departments. Tennessee Department of Education definitions are available at http:/web.utk.edu/~chrg/definitions.pdf.

! Overall, Grundy (34.9%) and Unicoi (32.2%) Counties had the highest percent of students receiving special education services (including gifted students). Both rates were almost twice as high as the state rate of 20%. Chester and Rhea Counties had the lowest rates at 14.3% and 14.2%, respectively.

! A total of 18,520 students were classified as gifted in 1998-99. The highest percentage of gifted students were in Anderson County (6.2%) and Sullivan County (5.6%) compared to 2.1% of Tennessee students who were gifted. Anderson County and Sullivan County also had the highest percentage of students receiving special education services who are gifted, at 23.8% and 23%, respectively. Several counties had no students receiving such services for gifted students including Lake, Perry, and Pickett Counties.

Student Transportation Injuries

! Total student accidents per 10,000 enrolled in transportation was lower than in 1993-1994 at 14.6 per 10,000 compared to 13.5 in 1998-99. Haywood and Dyer Counties had the highest prevalence of student accidents per 10,000 students enrolled for transportation at 40 and 39 respectively compared to 13.5 statewide.

! Total student accidents per 10,000 students transported 1.5 miles or more was 17.3 in 1998-99, the same rate as in 1993-94. Unicoi County at 66.2 and Dyer County at 51.3 had relatively high prevalence of student accident rates per 10,000 students transported 1.5 miles or more in 1998-99, compared to a rate of 17.3 statewide. In 1998-99, some counties had no property damage or injury accidents involving students enrolled for transportation. These included Bledsoe, Cannon, Clay, Cocke, Decatur, Giles, Hardin, Lake, Marion, Polk, Union, Van Buren and Wayne Counties.

! Students treated and released for transportation injuries per 10,000 students enrolled for transportation services reached a prevalence of 4.9 in 1998-99, increasing by 35% from 3.2 in 1993-94.

! Students treated and released for transportation injuries per 10,000 transported 1.5 miles or more also rose from 3.8 in 1993-94 to 6.3 in 1998-99, an increase of about 40%.

Students Eligible for Free or Reduced Cost Lunches

! An important measure of poverty is the percent of students eligible for free or reduced-cost lunches. A total of 43.7% of Tennessee students were eligible for this program in 1998-99.

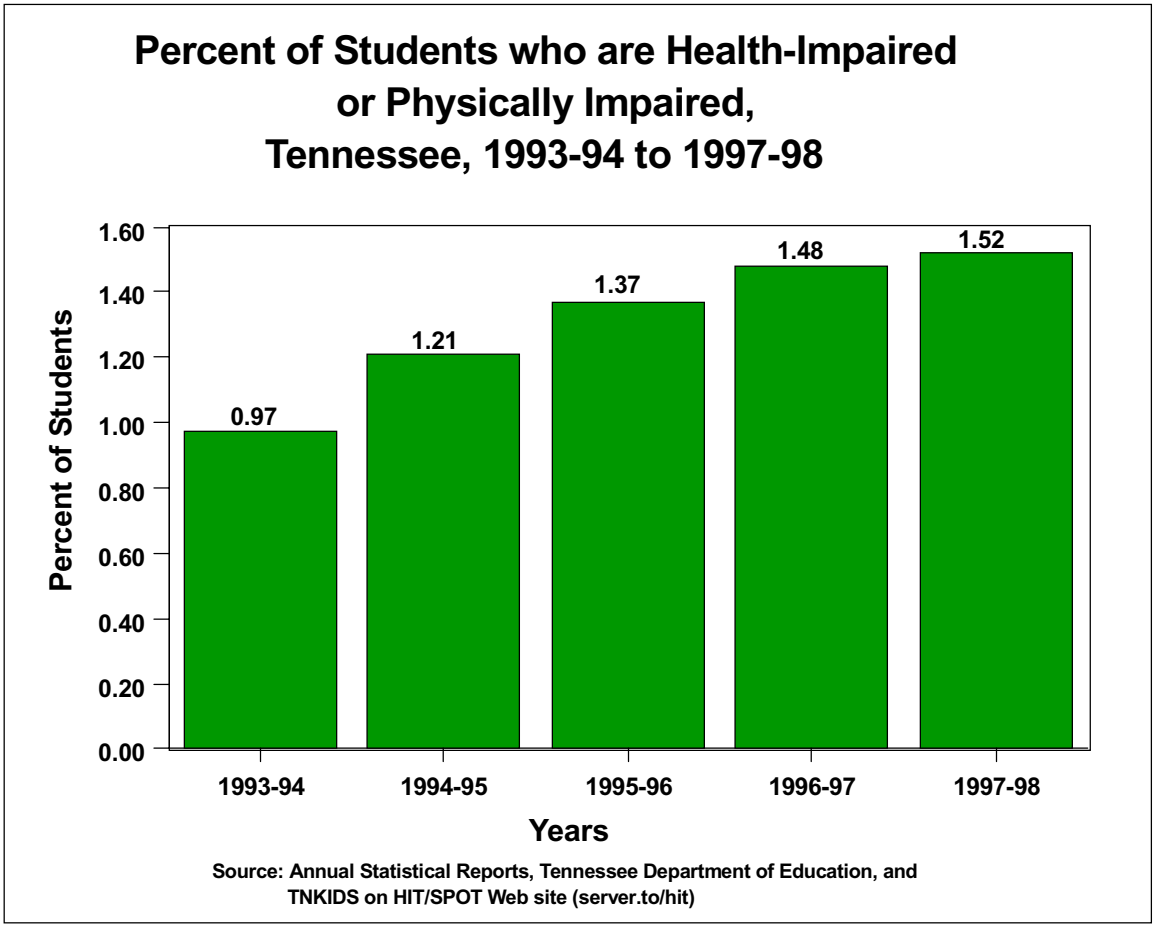
! By far the highest percentage of students eligible for this program were in Hancock and Fayette Counties at 88.6% and 85% of students, respectively in 1998-99. Williamson County had by far the lowest prevalence at 8.2% of students.

! The percentage of students eligible to receive free or reduced-cost lunches has increased from 40.5% of students in 1993-94 to 43.7% in 1998-99, an increase of 7%.

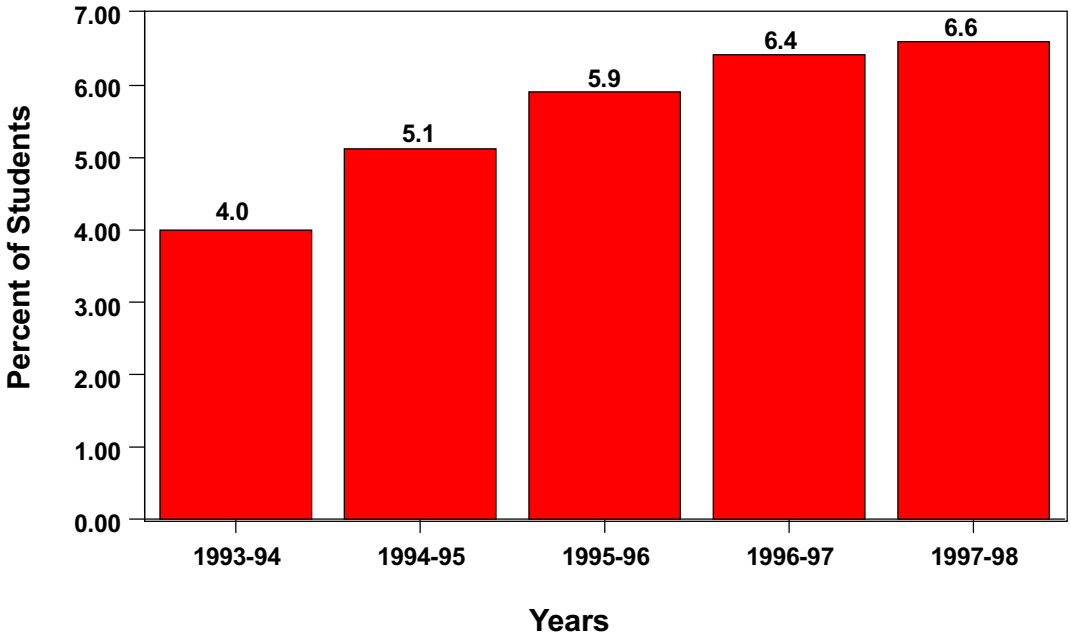
Student to Teacher Ratios in Tennessee

! Student to teacher ratios in Tennessee have declined more for elementary students and teachers (by 8.4%) than for high school students and teachers (by 5.8%) from 1993-94 to 1998-99. In 1998-99, the student to teacher ratio for elementary and secondary schools was 16.3 and 16 students per teacher, respectively.

Source: Tennessee Department of Education Annual Statistical Report, 1998-1999 and Web site (**www.state.tn.us/education**).

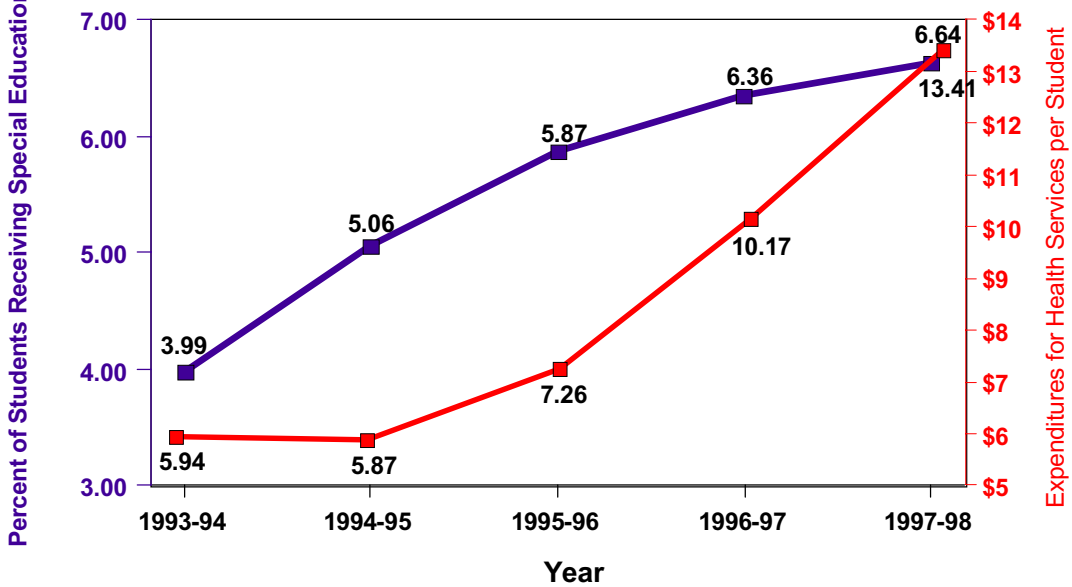


Percent of Students Receiving Special Education Services who are Health-Impaired Tennessee, 1993-94 to 1997-98



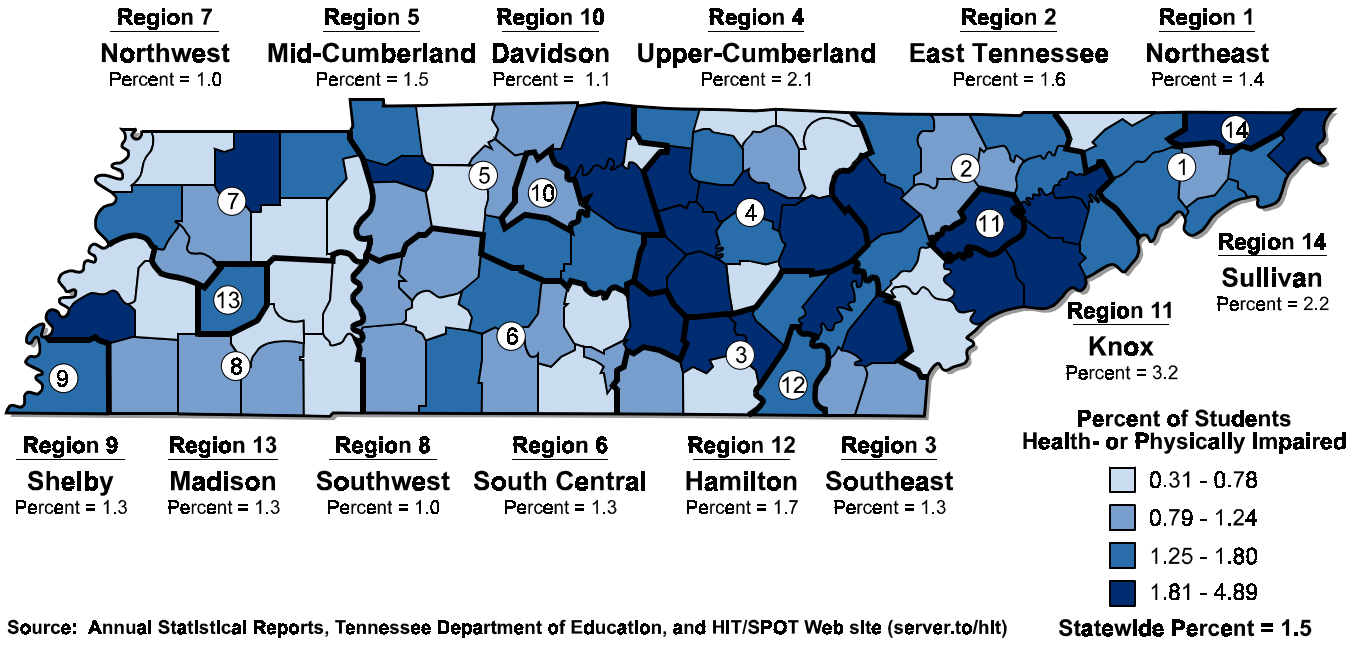
Source: Annual Statistical Reports, Tennessee Department of Education and TNKIDS on HIT/SPOT Web site (server.to/hit)

Percent of Students Receiving Special Education Services who are Health-Impaired and Expenditures for Health Services per Student Tennessee, 1993-94 to 1997-98



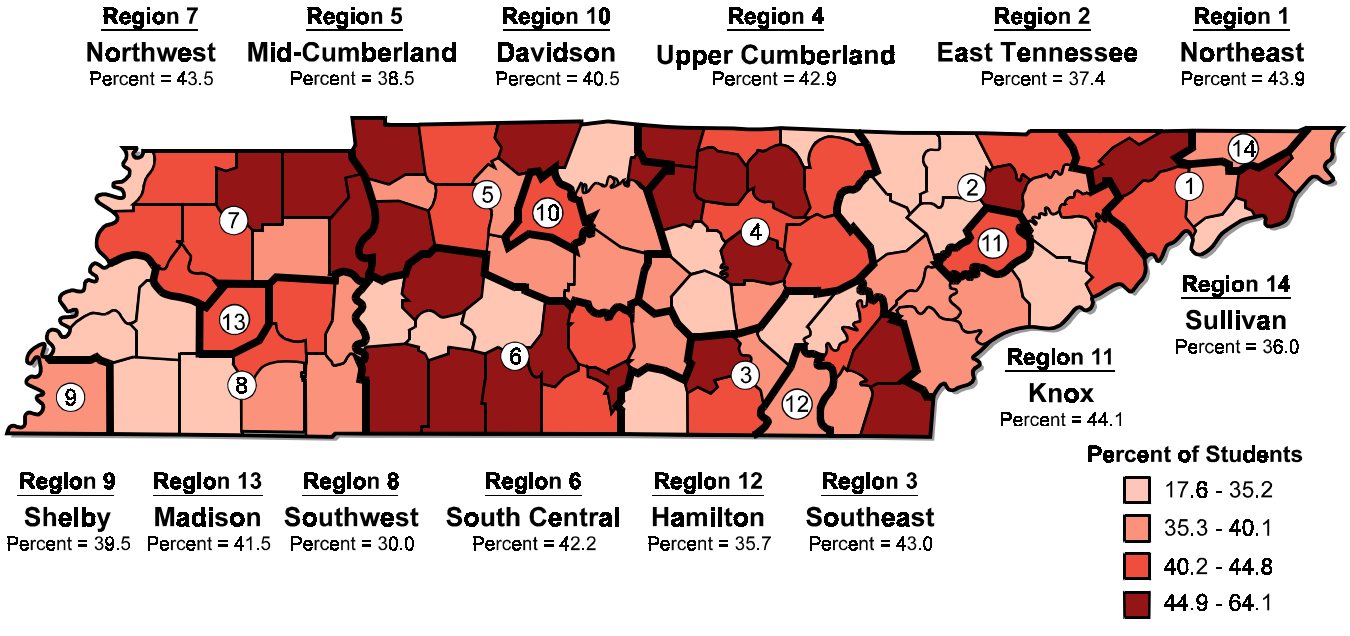
Source: Annual Statistical Reports, Tennessee Department of Education, and TNKIDS on HIT/SPOT Web site (server.to/hit)

PERCENT OF STUDENTS WHO ARE HEALTH-IMPAIRED OR PHYSICALLY IMPAIRED BY COUNTY AND REGION, TENNESSEE, 1997-98 SCHOOL YEAR



Source: Annual Statistical Reports, Tennessee Department of Education, and HIT/SPOT Web site (server.to/hit)

PERCENT OF STUDENTS RECEIVING SPECIAL EDUCATION SERVICES WHO ARE LEARNING DISABLED, BY COUNTY AND REGION, TENNESSEE, 1997-98



Source: Annual Statistical Reports, Tennessee Department of Education, and HIT/SPOT Web site (server.to/hit)

ADULT HEALTH STATUS IN TENNESSEE BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), 1998[6]

The BRFSS is a nationwide telephone survey of adults age 18 or older that is conducted annually by the Centers for Disease Control and Prevention. For the 1998 Tennessee sample, collected by the Tennessee Department of Health, 2,944 individuals were interviewed. Study sample percentages by category were as follows: 65% females, 35% males, 84% whites, and 16% non-whites. The data reported are based on weighted percentages.

Health Access

- In 1998, 13% of adult Tennesseans reported that they had no health insurance coverage. Males were significantly[7] more likely than females to be without health insurance (15% vs. 12%). Nonwhites were significantly more likely to be uninsured than whites (18% vs. 12%)[7].

- Over one-third of unemployed persons (36%) were uninsured. As income decreased, the lack of health insurance coverage dramatically increased. While only 4% of those in the highest income bracket ($\geq$$75,000 per year) reported that they had no health insurance, 23% of those in the lowest income bracket ($\leq$ $15,000) reported lack of coverage.

- By age-group, those 65 years and over were least likely to be without health insurance (5%), while 18-24 year olds were most likely to be without health insurance (22%).

General Health Status

- Overall, 18% of Tennessee adults ages 18 years and over described their general health status as fair or poor in 1998. This level was similar to that from the previous year's BRFSS.

- While females were slightly more likely than males to perceive their health as fair or poor (19% vs. 17%, respectively), the difference was not statistically significant.

- Likewise for nonwhites and whites, there was very little difference in perceived fair or poor health status (19% vs 18%, respectively), which was not statistically significant.

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[6]At the time of report preparation, 1999 data was not yet available.

[7]A *p*-value of 0.05 was used to assess statistical significance.

Morbidity

Diabetes

! Approximately 6% of adult Tennesseans reported having ever been told by a health professional that they have diabetes. This is up from 4% in 1997. Of the race-gender groups, nonwhite females had the highest reported prevalence of diabetes, at 8%.

! The prevalence of diabetes reported appeared to be inversely associated with income and education; the lower the income and the less well-educated, the more likely an individual was to report having been diagnosed with diabetes. The levels ranged from 11% among those with household incomes below $15,000 to 2% among those in households with incomes at or above $75,000. Less than 4% of college graduates reported diabetes, compared to about 10% of those having less than a high school education.

Hypertension

! Nearly all adult Tennesseans (97%) reported that they had their blood pressure checked by a health professional within the past 2 years. Twenty-nine percent of adult Tennesseans reported having been told their blood pressure was high.

! Significantly more females reported hypertension than males (33% vs. 24%). Nonwhite females were the race-gender group with the highest reported prevalence of hypertension (36%), while nonwhite males were the race-gender group with the lowest reported prevalence of hypertension (24%). Twenty-four percent of white males also reported ever having been told that their blood pressure was high.

Utilization of Preventive Services

Flu Immunization

! Seventy percent of Tennessee adults ages 65 or older reported that they had received a flu shot within the past 12 months. Although the difference was not statistically significant, 71% of white seniors had been immunized against the flu, while only 59% of nonwhite seniors had been immunized. Males (71%) and females (69%) aged 65+ were similarly likely to have received the flu shot.

Pneumonia Vaccination

! Nearly half (49%) of Tennesseans aged 65+ reported they had never received a pneumonia vaccination. Nonwhite seniors were more likely than white seniors to report never receiving the vaccination (68% vs. 47%), with 75% of nonwhite females aged 65+ reporting never having received the pneumonia vaccine.

Cholesterol Screening

! Approximately three-quarters of Tennessee adults reported that they had had their cholesterol checked in the past 5 years. There was a significant difference between males and females and between white and nonwhite females. Seventy-two percent of males had their cholesterol checked in the past 5 years, compared to 77% of females. White females were the race-gender group that most commonly reported having their cholesterol checked in the past 5 years, while nonwhite females were the least common race-gender group to report cholesterol screening (79% vs. 70%, respectively).

Mammograms and Clinical Breast Examinations

! Twenty percent of females aged 40 and over reported never having had a mammogram and clinical breast examination (CBE). While the risk of breast cancer increases with age, in 1998, females in the oldest age-group were the most likely to report that they never had a mammogram and CBE (25%).

! Females at the lowest income levels were considerably more likely to report that they never had a mammogram and CBE (29%) than were females at the highest income levels (8%). Education level also appeared to play a role in whether or not a woman reported having a mammogram and CBE. Thirty-one percent of females over 40 years of age with less than a high school education never had a mammogram and CBE; of those with a college degree or more, only 10% never had a mammogram and CBE.

! While annual breast cancer screening for females aged 50 years and over is widely recommended, 29% of females in this age-group had not had a mammogram and CBE in the past 2 years in Tennessee as of 1998.

PAP Smears

! Although having a yearly Papanicolaou (Pap) test is recommended for all females over 18 years old, 14% of females in this age-group reported that they had not had a Pap test in the past 3 years, and 7% reported that they had *never* had a Pap test.

! Broken down further by age-group, a relatively high percentage (20%) of females ages 18 to 24 had never had a Pap test. Females with lower educational attainment were more likely to have never had the test (13% of females with less than a high school education; 10% of high school graduates; 4% of females with some college; 3% of college graduates).

Injury Control

Safety Belt Use

! In 1998, nearly 1/3 (32%) of adult Tennesseans reported that they did not always wear a safety belt. Males were more likely to report this than females (39% vs. 24%). Nineteen percent of all adult Tennesseans, 26% of males and 14% of females, reported that they sometimes, seldom, or never wore a safety belt in an automobile.

Risk Factors for Disease and Injury

Weight

! Based on the Body Mass Index (BMI), 32% of adult Tennesseans sampled in the 1998 BRFSS were overweight. Nonwhites were more likely to be overweight (based on a higher BMI) than whites (39% vs. 31%). Nonwhite females were the race-gender group with the highest prevalence of being overweight (45%), while the lowest prevalence was found among white females (30%).

! Among all Tennessee females, almost half (46%) of those 55 to 64 years of age were considered overweight. The age-group of Tennessee males with the highest prevalence of being overweight was 45 to 54 years (40%).

Physical Activity

! In Tennessee, about 10% of adults had engaged in regular and vigorous physical activity[8] in the past month. Thirty-six percent of adult Tennesseans reported spending no leisure time on physical activity in the past month. There was a statistically significant difference by gender, with 38% of females and 33% of males spending no leisure time on physical activity.

! More than half (52%) of respondents aged 75 or older reported that they were physically inactive. Those with lower incomes and less education were also more likely to report being physically inactive. In households with incomes of $75,000 or more per year, 14% of respondents reported physical inactivity, while 49% of those living in households with annual incomes of less than $15,000 reported physical inactivity. By educational level, 17% of college graduates reported physical inactivity, while 58% of individuals with no high school degree reported physical inactivity.

[8]Regular and vigorous activity is defined as 20 or more minute sessions of exercise 3 or more times a week at 50% or more capacity.

Diet/Nutrition

! The Food and Drug Administration recommends consuming five or more fruits and vegetables a day to reduce the risk of certain chronic diseases, including cancer and heart disease. In Tennessee, only 30% of adults are complying with this recommendation. Significantly more females than males (33% vs. 26%) and more whites than nonwhites (32% vs. 20%) consumed five or more fruits or vegetables a day in 1998.

! In addition, as household income increased, the percentage of individuals reporting that they eat five or more fruits and vegetables per day increased. Those individuals in the highest income bracket ($75,000 or more per year) reported eating more fruits and vegetables (41%) than those in the lowest income bracket (less than $15,000, 25%).

Smoking

! Current smokers were defined as persons reporting ever smoking 100 cigarettes and who smoked at the time of the survey, either every day or some days. Current smokers represented 26% of Tennessee adults. A significantly higher percentage of males were current smokers (30%) compared to females (22%). The race-gender group with the highest prevalence of current smokers was nonwhite males, at 41%, while nonwhite females had the lowest prevalence (19%).

! Persons with lower incomes were more likely to be current smokers, at 35% for those with an annual household income of less than $25,000. This is considerably higher than the 20% of those with an income of $50,000 to $74,999 who reported that they were current smokers. Even fewer (18%) of those with incomes of $75,000 and over reported being current smokers.

Binge Drinking of Alcoholic Beverages

! Binge drinking is defined as drinking five or more drinks on at least one occasion during the past month. The overall prevalence of binge drinking among Tennessee adults was 7%, with 10% of males and 3% of females reporting binge drinking.

! Whites were more likely to binge drink than nonwhites (7% vs. 2%). At 12%, white males were more likely to binge drink than any other race-gender group; nonwhite females were the least likely to binge drink (1%).

Chronic Drinking of Alcoholic Beverages

! Less than 2% of Tennessee adults reported chronic drinking (i.e., drinking 60 or more drinks during the past month). While no significant differences were found by race, males were more likely to report chronic drinking than females (2.1% vs. 0.4%).

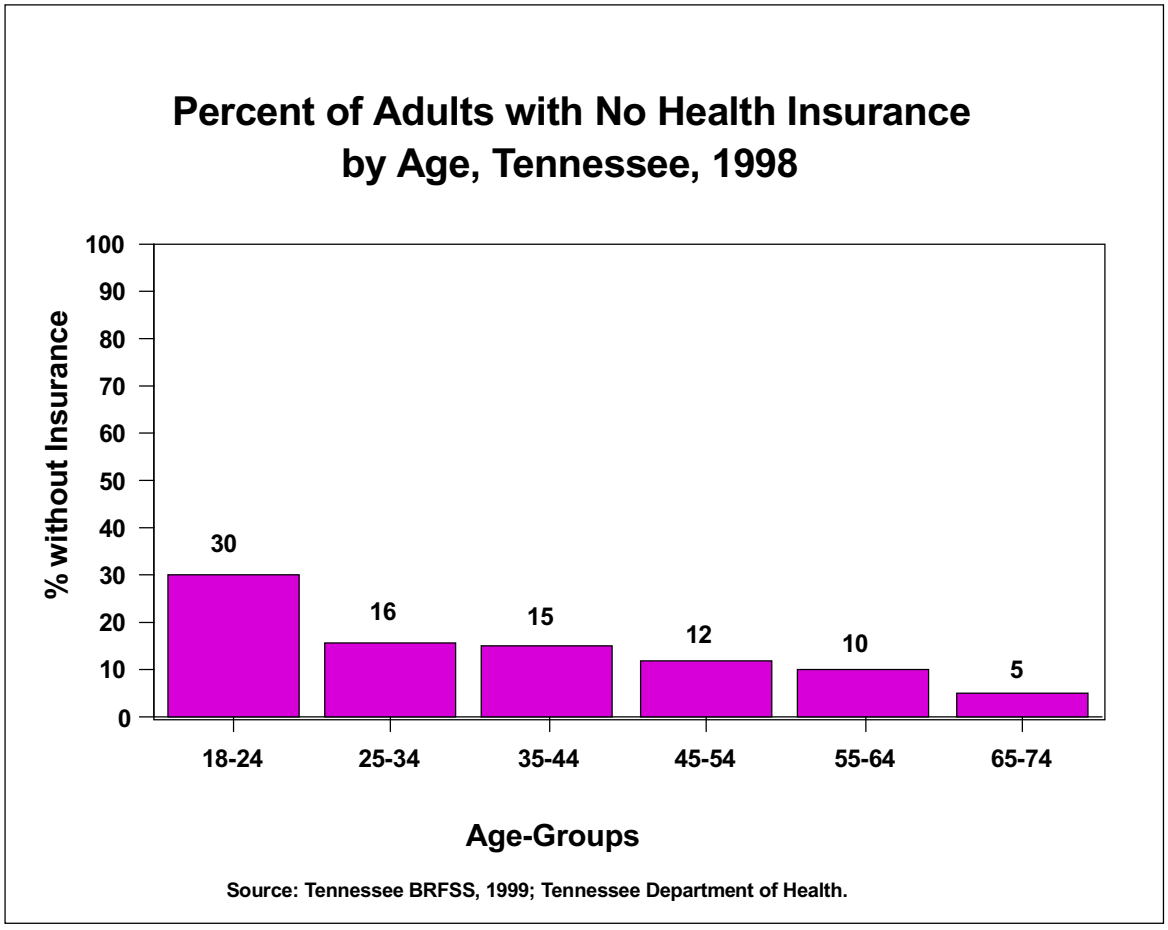
Drinking and Driving

- About 1% of Tennessee's adult population reported driving after having too much to drink one or more times during the past month. There were no significant differences by race or gender.

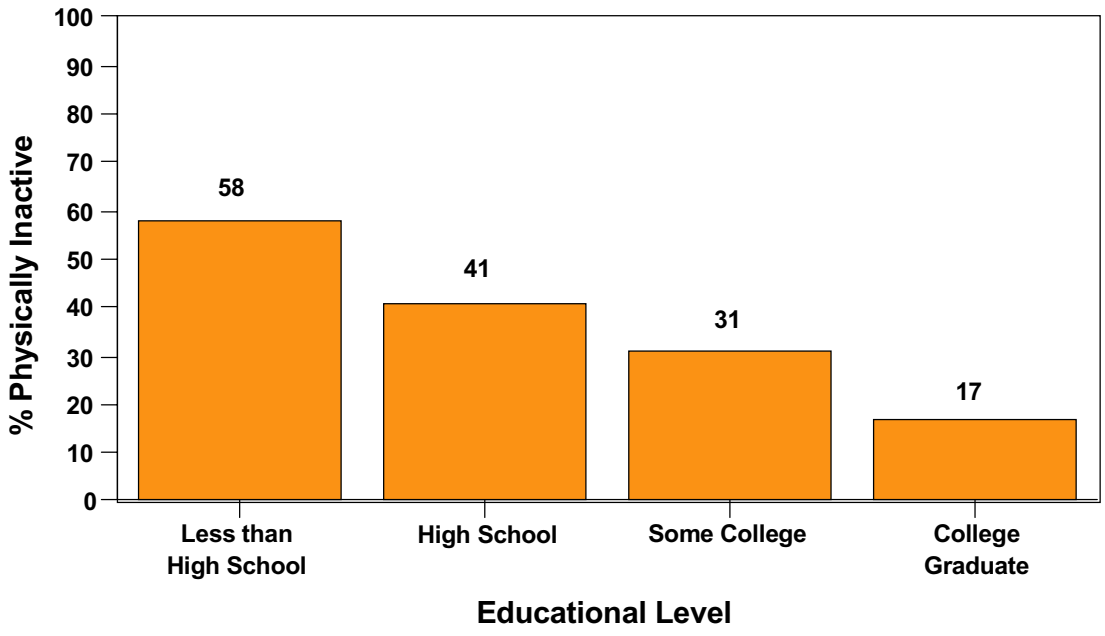
AIDS Risk

- Among 18- to 64-year-old Tennesseans, about 7% perceived a medium-to-high risk of getting AIDS. While 8% of males perceived a medium-to-high risk of AIDS, 5% of females perceived the same risk. The difference was more pronounced among whites and nonwhites, with 10% of whites and 6% of nonwhites perceiving that level of risk of AIDS.

Source: *State Prevalence Report of Risk Factors for Tennessee, 1998*, and *Tennessee Statewide Survey Data, 1998 – Weighted*, Centers for Disease Control and Prevention and Tennessee Department of Health.

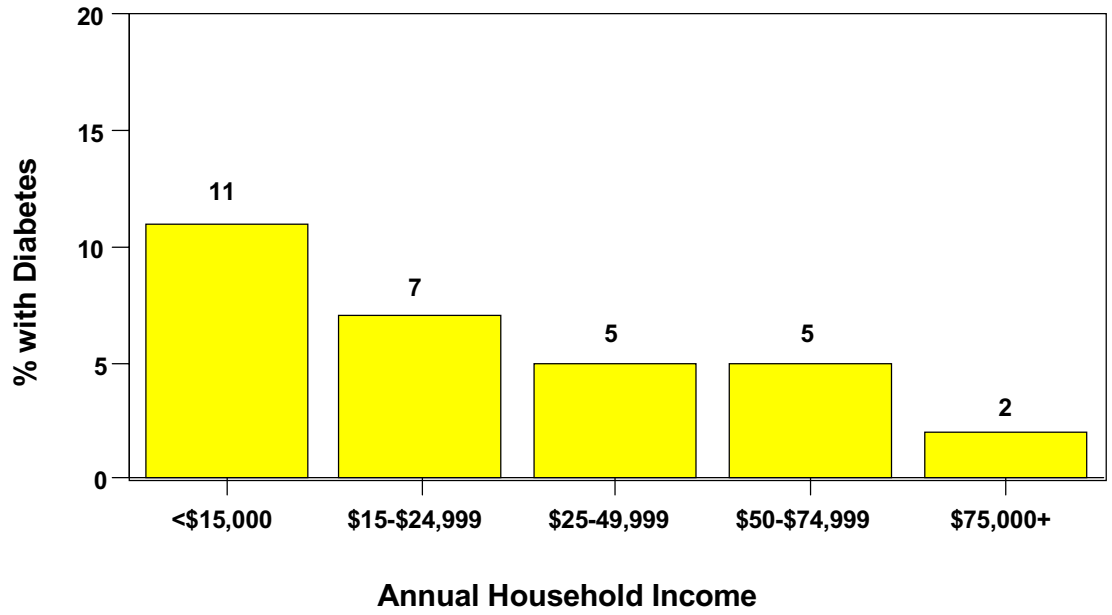


Percent of Adults Who Are Physically Inactive by Educational Level, Tennessee, 1998



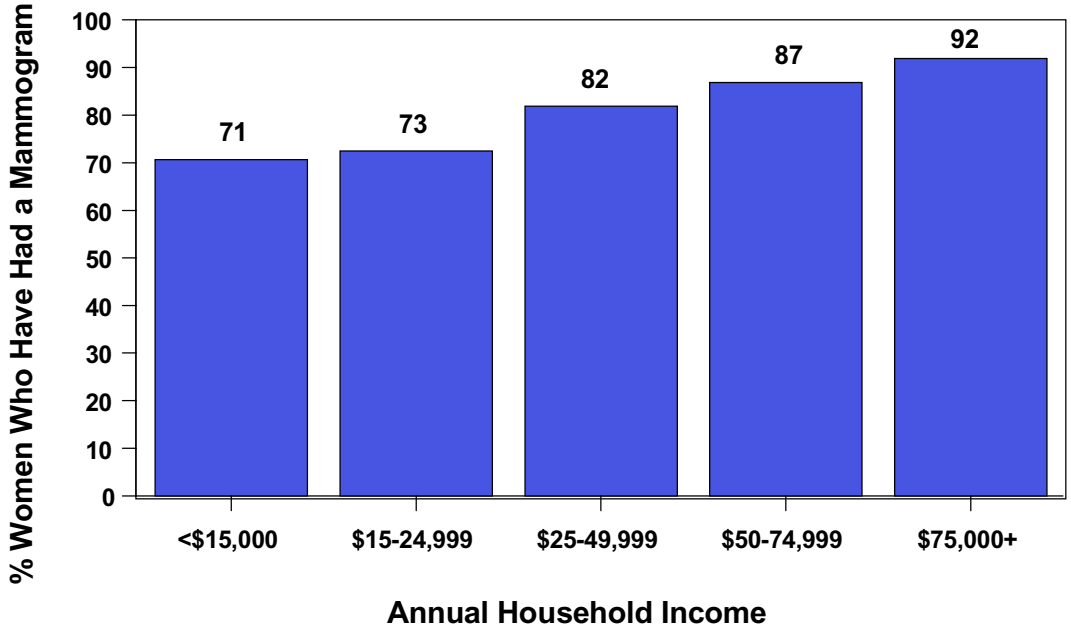
Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

Percent of Adults with Diabetes by Income, Tennessee, 1998



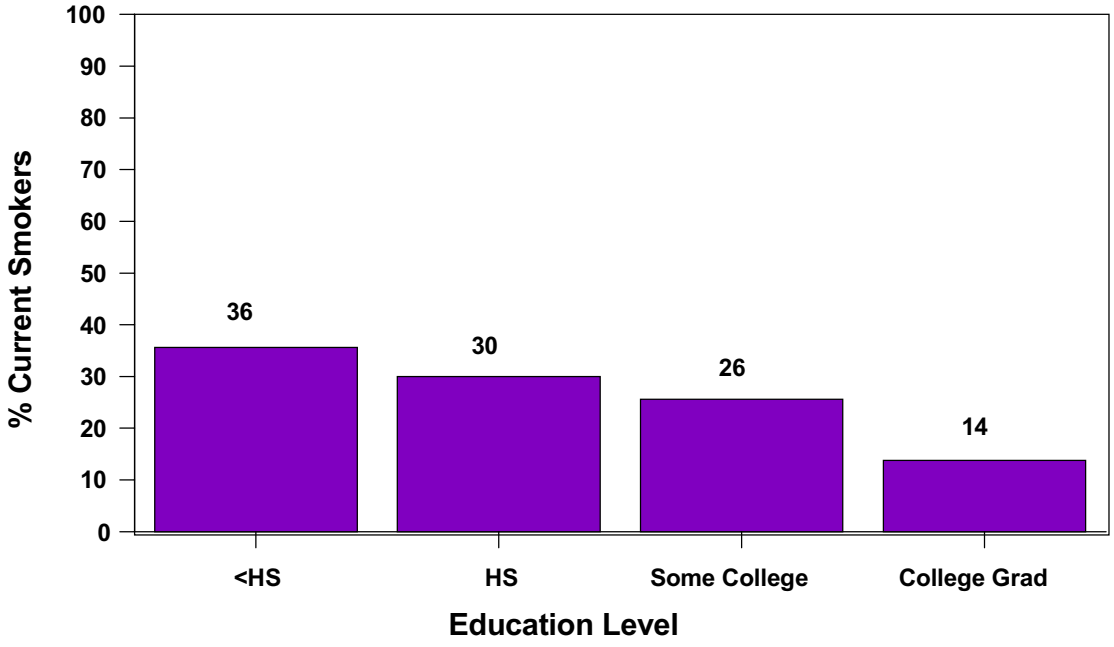
Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

Percent of Women Who Have Had a Mammogram by Income, Tennessee, 1998



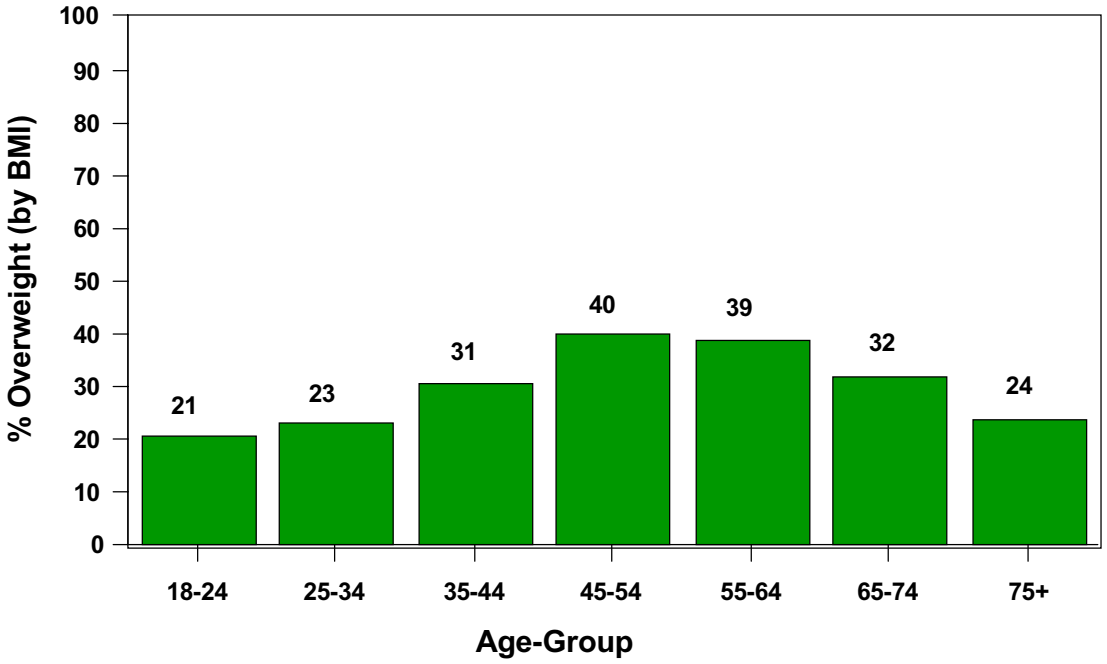
Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

Percent of Adults Who Currently Smoke by Education Level, Tennessee, 1998



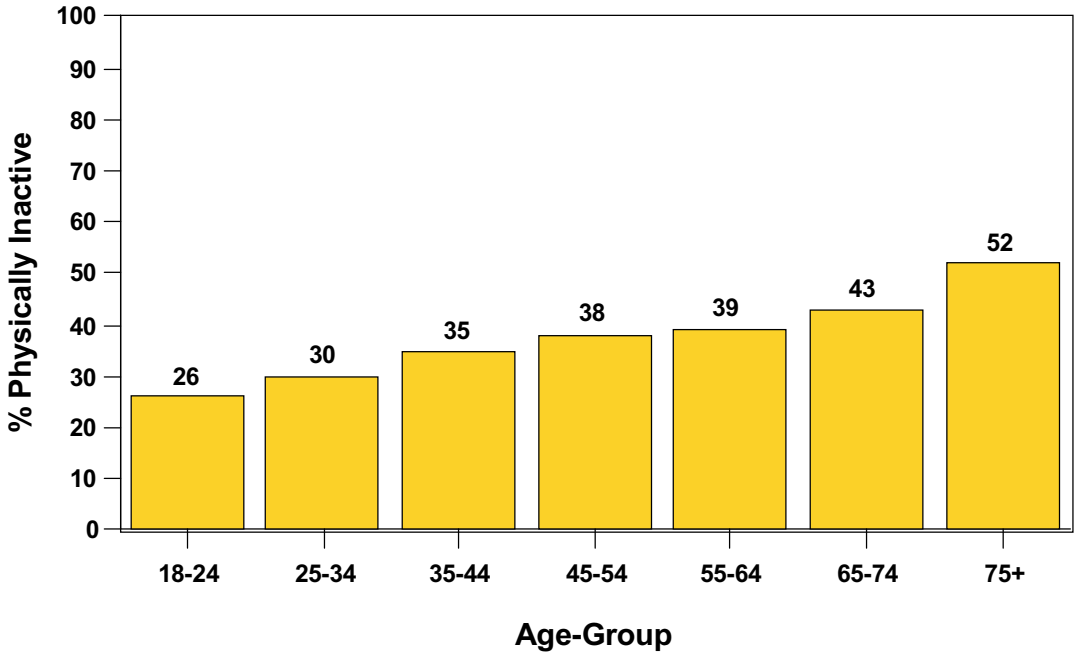
Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

Percent of Adults Who Are Overweight by Age, Tennessee, 1998



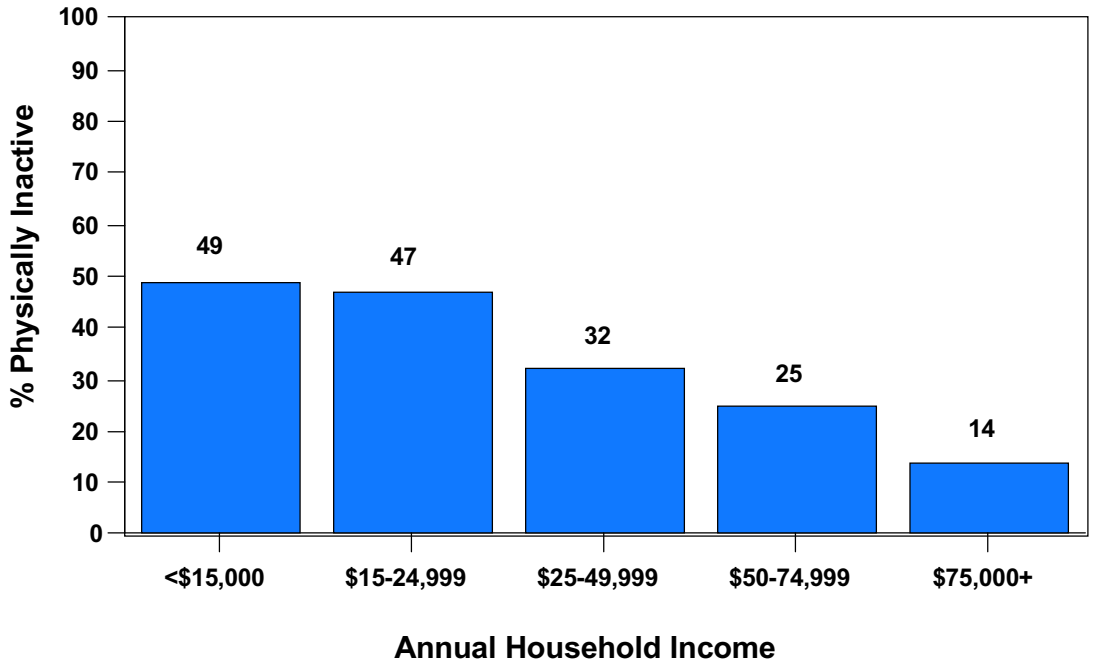
Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

Percent of Adults Who Are Physically Inactive by Age, Tennessee, 1998



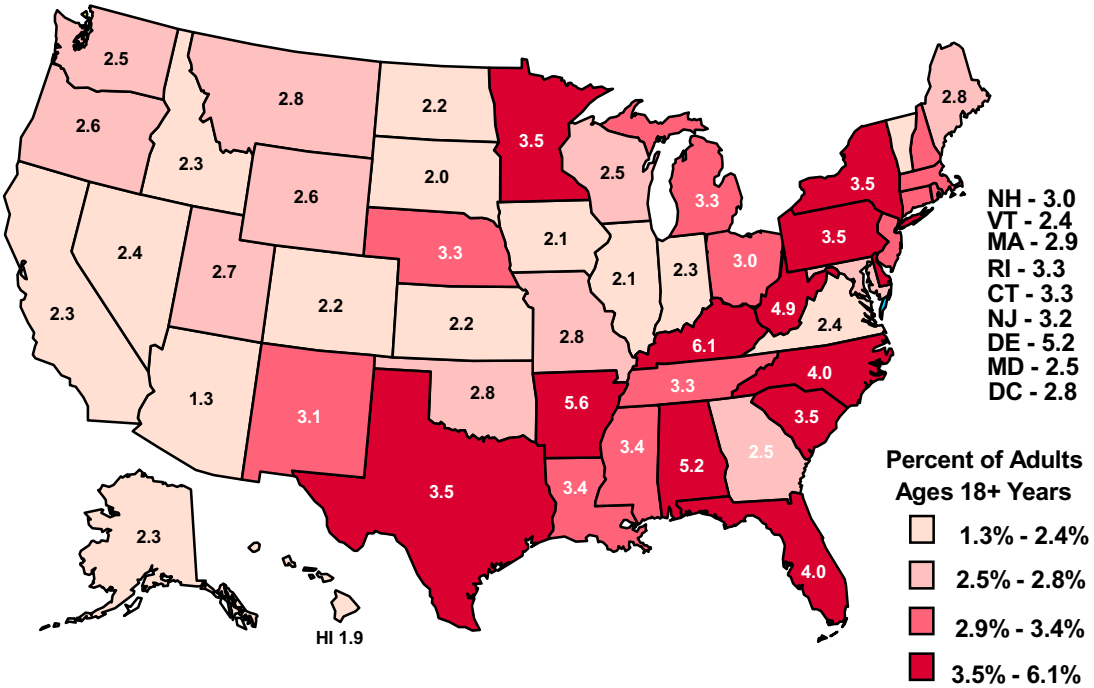
Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

Percent of Adults Who Are Physically Inactive by Income, Tennessee, 1998



Source: Tennessee BRFSS, 1999; Tennessee Department of Health.

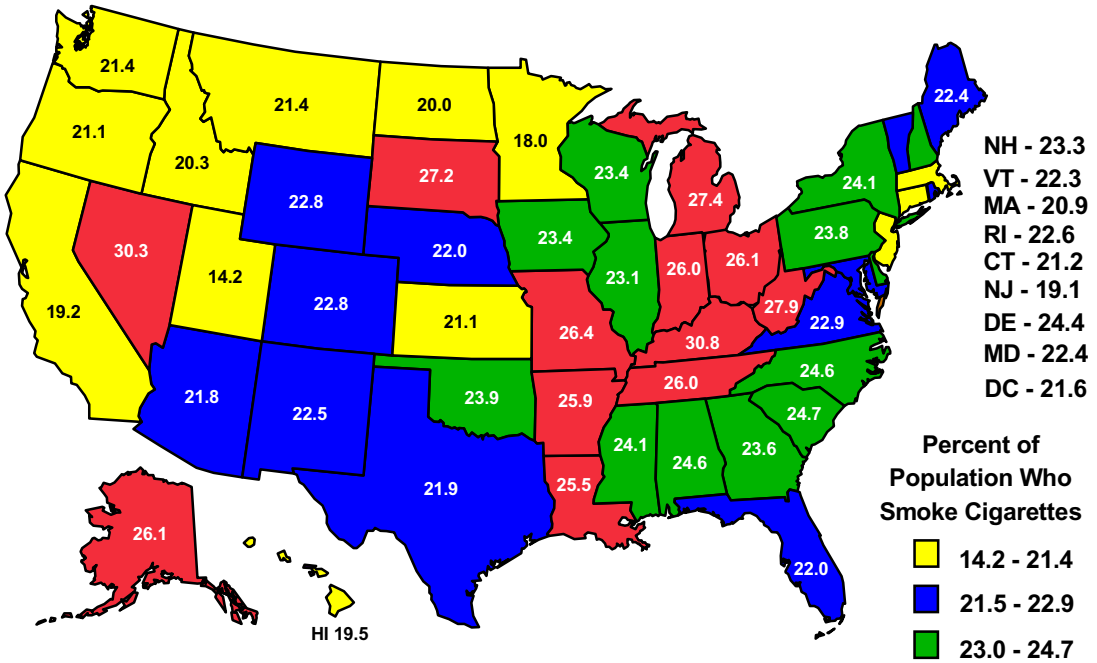
Adults Who Reported Limited Activity Because of Poor Mental or Physical Health, BRFSS, 1998



Tennessee - 3.3%; United States - 2.8%

Source: Tennessee State Health Profile, 2000, CDC.

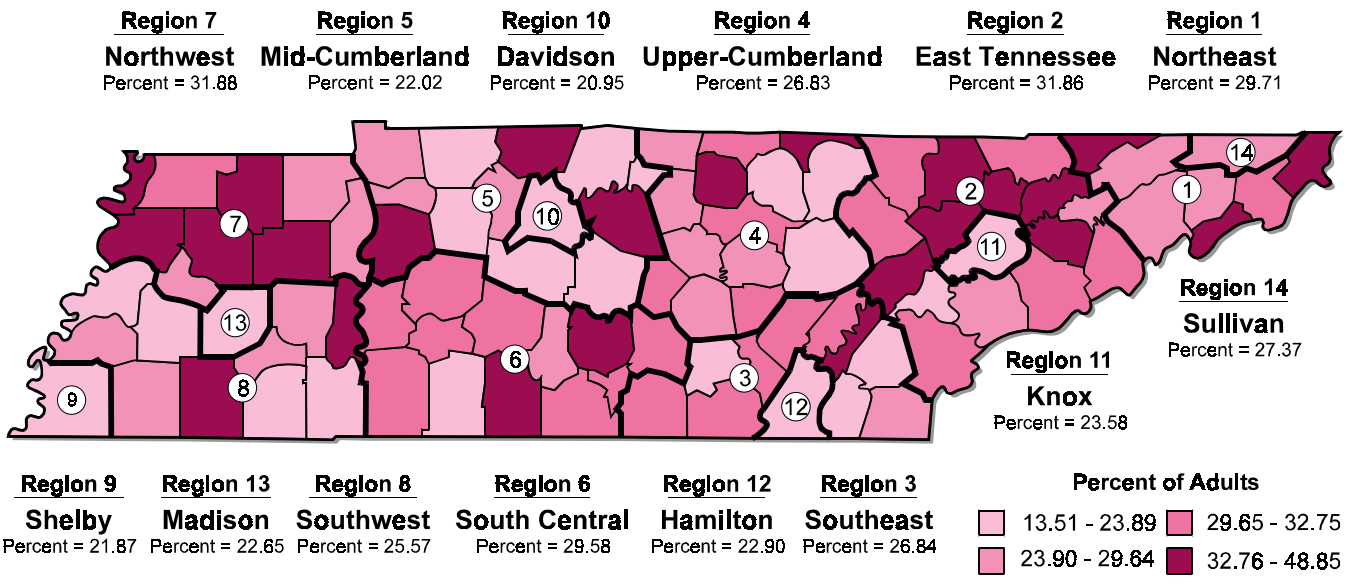
Percent of Population Who Smoke Cigarettes, 1998



Tennessee - 26.0; United States - 22.9

Source: Behavioral Risk Factor Surveillance Survey, 1998, CDC.

PERCENT OF ADULTS REPORTING CURRENT ADDICTION TO TOBACCO/NICOTINE BY COUNTY AND REGION, TENNESSEE, 1998



Statewide Percent = 25.31

Source: Tennessee Adult Health and Lifestyles Survey, 1998; Community Health Research Group, UT; Bureau of Alcohol and Drug Abuse Services, TDH; and HIT/SPOT Web site (server.to/hit)

HEALTH CARE ACCESS, UTILIZATION, AND ALCOHOL AND OTHER DRUG (AOD) USE AND ABUSE AMONG TENNESSEE ADULTS[9]

The Tennessee Health and Lifestyles Survey (THLS) was a statewide county-level random digit dial telephone survey of approximately 11,000 Tennessee adults aged 18 or older who were living in households. In 1998, the Community Health Research Group (CHRG) conducted the survey under the sponsorship of the Tennessee Department of Health. THLS provided data on the prevalence of AOD use, abuse, and associated health and lifestyle problems in Tennessee. Researchers at CHRG also collected information on the availability and utilization of health care services, and numerous behavioral risk factors for comparison with BRFSS.

Availability and Utilization of Health Services by Adults

- Fifteen percent of the 11,150 study participants reported that they had no usual source of health care, and about 8% said that they had been unable to get medical care at least once in the past year. Responses differed considerably by county, with about 25% of Morgan County and Sequatchie County residents reporting they had no usual source of health care. In Smith and Decatur Counties, however, less than 5% of residents reported no usual source of health care. Residents of White and Shelby Counties had the highest percentage of respondents reporting inability to get medical care at least once in the past year (22% and 14%, respectively), while this was reported by less than 1% of Williamson County and Lincoln County residents.

- Seventy-one percent of those surveyed said they had seen a health care provider for a problem related to their physical health at least once in their lifetimes (range: 58% in Macon County to 86% in Coffee). Thirty-seven percent had done so in the past year (range: 21% in VanBuren County to 54% in McNairy).

- Statewide, 91% of adults surveyed had had a routine checkup or health screening at least once in their lifetimes, and 55% had had one in the past year. Williamson and White Counties had the highest percentage of persons reporting that they had had a routine checkup or health screening in the past year, at 69% and 66%, respectively. Coffee and Overton Counties had the lowest prevalence (39% and 37%, respectively).

[9]Tennessee Health and Lifestyles Survey, Weighted Data, 1998, conducted by The University of Tennessee, Knoxville, Community Health Research Group, sponsored by the Tennessee Department of Health, Bureau of Alcohol and Drug Abuse Services.

Alcohol and Other Drug Use and Abuse

! After caffeine, alcohol was the most commonly used drug with a lifetime prevalence of 79.5% and a 12-month prevalence of 52.5% among all adult respondents. About 36% of adult respondents had drunk alcohol in the last 30 days, and 28% had drunk alcohol in the last 14 days.

! Approximately 16% of Tennesseans reported that they engaged in heavy or binge drinking (drinking five or more drinks of alcoholic beverages on a single occasion) in the past year. Heavy/binge drinking varied considerably by county, with the highest prevalence reported in Cheatham and Crockett Counties (33% and 31%, respectively) and the lowest prevalence in Fentress and Grundy Counties (7% and 4.4%, respectively).

! More than half of Tennessee adults had ever smoked more than 100 cigarettes[10]. Thirty percent had smoked cigarettes in the 12 months prior to the survey, and nearly the same proportion (28%) had smoked in the last 30 days.

! Twenty-four percent of adults reported lifetime use of chewing or smokeless tobacco, with 12% using smokeless tobacco in the 12 months before the survey, and 8% in the previous 30 days.

! Lifetime use of psychoactive prescription drugs was common among adults, in decreasing order of frequency - painkillers (60%), tranquilizers (27%), sedatives (16%), and stimulants (10%). However, *abuse* of prescription drugs was much less frequently reported. Abuse is defined as use for non-medical purposes. Six and one-half percent of Tennessee adults reported ever abusing prescription drugs, 1.2% reported abusing in the past 12 months, and 0.3% in the past 30 days.

! Among illicit drugs, marijuana was the most frequently used - with a lifetime use prevalence of 29%, a 12-month use prevalence of 5%, and a 30-day use prevalence of 2.6%.

[10]May not correspond to cigarette use reported in the BRFSS due to differences in sampling method and survey design.

The following table presents the prevalence of lifetime and 12-month alcohol and other drug use in Tennessee as a whole in 1998.

Lifetime and 12-Month Prevalence of Alcohol and Other Drug Use, Tennessee, 1998

Drug	% Ever Used	% Used Past 12 Months
Caffeine	98.7	96.7
Cigarettes	51.1	30.1*
Alcohol	79.5	52.5
Marijuana	28.8	5.1
Prescription Drugs (% Abused)	6.5	1.2
Cocaine/Crack	7.0	0.8
Hallucinogens	5.7	0.8
Heroin	0.9	**
Injection Drugs	0.7	**

* May not correspond to cigarette use reported in the BRFSS due to differences in sampling method.

** Numbers are small and estimates are unstable.

Alcohol and Other Drug Addiction/Dependence

! The highest proportions of drug users who reported addiction or dependence were addicted to tobacco/nicotine (63% of users) and caffeine (30% of users).

! Approximately one in eight heroin users (12%) reported addiction or dependence. Cocaine/crack use was reported as resulting in dependence by 11.5% of users, inhalants by 11% of users, marijuana by 8% of users, and alcohol by 8% of users.

! Regarding lifetime alcohol addiction among all respondents, levels varied by county from as low as 0% and 0.6% reported in Smith and Williamson Counties, respectively, to 14% and 17% in Weakley and Humphreys Counties, respectively.

Statewide levels of lifetime and current alcohol and other drug addiction among all adult respondents are reported in the following table.

Lifetime and Current Prevalence of Addiction to Alcohol and Other Drugs among Adults, Tennessee, 1998

Drug	% Ever Addicted	% Currently Addicted
Caffeine	29.4	23.5
Tobacco	37.2	25.3
Alcohol	6.7	1.0
Marijuana	2.2	0.5
Prescription Drugs	2.0	0.4
Cocaine/Crack	0.8	0.1
Heroin	0.1	**
Hallucinogens	0.1	**

** Numbers are small and estimates are unstable.

Note: The denominators here are total respondents not numbers of users by type of drug.

Drinking and Driving

! Almost half (49.4%) of the adults surveyed in Tennessee reported that they had driven after drinking alcohol in their lifetimes. Williamson and Marion Counties ranked the highest at 71.4% and 62.2%, respectively, while Claiborne and Fentress Counties ranked the lowest at 32.6% and 31.2%, respectively.

! Almost one-quarter of the adult population surveyed in Tennessee (24.6%) reported that they had driven after drinking five or more drinks of an alcoholic beverage in their lifetimes. Humphreys and Clay Counties showed the greatest frequency at 46.6% and 39.6%, respectively, while Overton and Fayette counties fell to the bottom, at 14.6% and 9.2%, respectively.

! Residents in metropolitan regions were slightly more likely to have ever driven a motor vehicle after drinking alcohol, at 50.7%, compared to 48.4% of nonmetropolitan residents. However, respondents who lived in nonmetropolitan regions were more likely (25.9%) to have ever driven after ingesting five or more alcoholic beverages than those respondents living in the metropolitan regions (22.8).

! Thirteen percent of Tennesseans reported drinking and driving after consuming any alcohol in the past 12 months, and 3.4% reported drinking and driving after consuming five or more alcoholic beverages in that period.

Alcohol and Other Drug Treatment

- **!** While almost 7% of study respondents reported having been addicted to alcohol in their lifetime, only 2.5% reported ever receiving any kind of treatment (including self-help) for alcohol-related problems. One percent of respondents reported current alcohol addiction, while 0.4% reported receiving treatment in the past year.

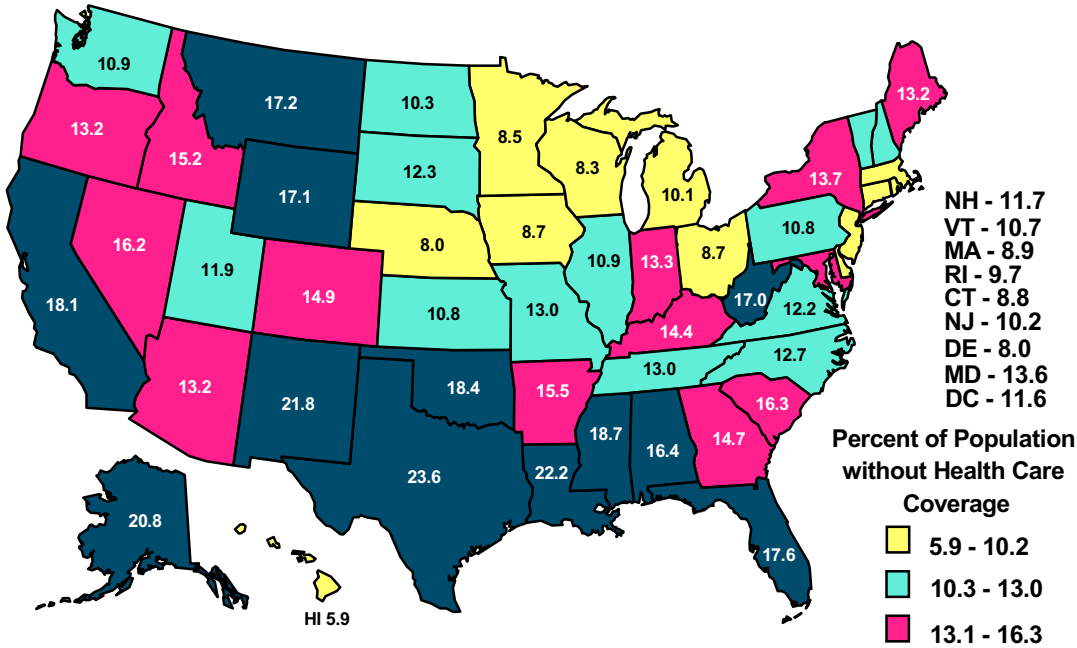
- ! Among certain counties, the treatment rates were considerably higher. For example, Humphreys and Crockett Counties had the highest percentage of persons who reported they had ever received treatment for alcohol problems (15.3% and 10.9%, respectively). At least some of the respondents from each county (except Smith) reported problems with alcohol addiction; however, in nine counties, no respondents reported ever receiving treatment for alcohol problems. These counties included Claiborne, Decatur, Grundy, McNairy, Marion, Monroe, Moore, Smith, and Wayne Counties.

- ! Thus, there is a sizable gap between levels of treatment needed and treatment provided. Treatment gap is defined as the percentage difference between the number of adults needing AOD treatment and the number ever having received treatment. Twenty percent of Tennessee adults needing AOD treatment had received it, leaving a 80% gap in treatment receipt compared to treatment need.

- ! INSURANCE: About 8.1% of respondents said they had no health Insurance (BRFSS data says 13%) and 11.1% said they were insured by TennCare* (actual = 24.2).

Source: Tennessee Health and Lifestyles Survey, Weighted Data, 1998, conducted by The University of Tennessee, Knoxville, Community Health Research Group, sponsored by the Tennessee Department of Health, Bureau of Alcohol and Drug Abuse Services.

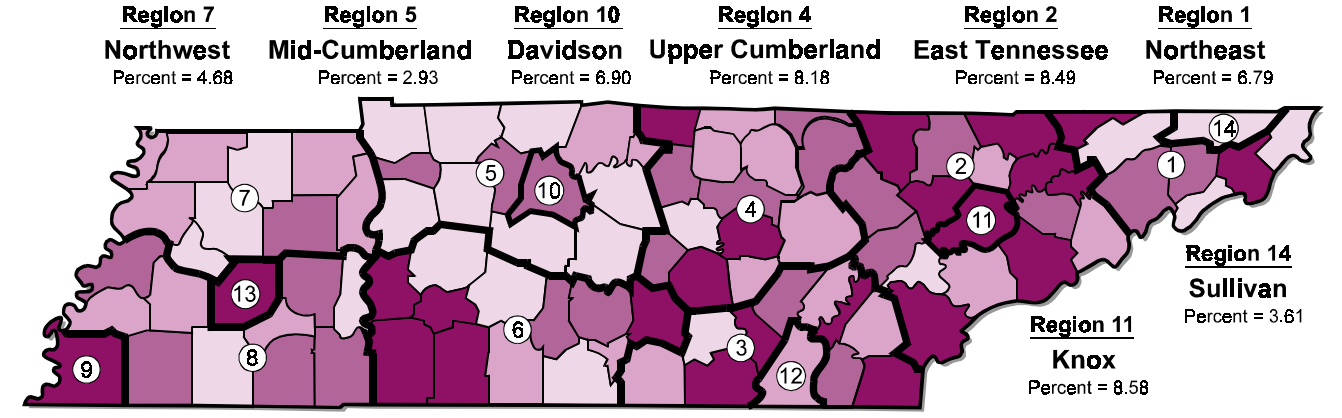
Percent of Population without Health Care Coverage, 1998



Tennessee - 13.0; United States - 13.0

Source: National Center for Chronic Disease Prevention & Health Promotion, CDC.

PERCENT OF ADULTS REPORTING INABILITY TO OBTAIN MEDICAL CARE IN THE PAST YEAR, BY COUNTY AND REGION, TENNESSEE, 1998



Source: Tennessee Adult Health and Lifestyles Survey, 1998; Community Health Research Group, UT; Bureau of Alcohol and Drug Services, TDH; and HIT/SPOT Web site (server.to/hit)

Statewide Percent = 7.64

TENNESSEE'S PROGRESS TOWARD SELECTED U.S. HEALTHY PEOPLE 2000 OBJECTIVES

Established by the United States Department of Health and Human Services, the Healthy People 2000 objectives are national standards that help states to achieve improved health status. Healthy People 2000 indicators relating to mortality, teenage pregnancy and births, adult behavioral risks factors, and other topical areas are examined to assess Tennessee's progress toward meeting these national objectives.

MORTALITY

REDUCE CORONARY HEART DISEASE MORTALITY
(Healthy People 2000 Objectives 1.1, 1.1a)

1998 TN:	118.4 deaths per 100,000 for Tennessee
2000 U.S. Target:	100 deaths per 100,000 for the U.S.
Status:	Tennessee must decrease the number of deaths per 100,000 by 15.5% to achieve the national goal.
1998 TN:	168.7 deaths per 100,000 for Tennessee blacks
2000 U.S. Target:	115.0 deaths per 100,000 for U.S. blacks
Status:	Tennessee must decrease the number of deaths per 100,000 blacks by 32% to achieve the national goal.

REDUCE STROKE MORTALITY
(Healthy People 2000 Objectives 2.2, 2.2a)

1998 TN:	31.3 deaths per 100,000 for Tennessee
2000 U.S. Target:	20 deaths per 100,000 for the U.S.
Status:	Tennessee must decrease the number of deaths per 100,000 by 36% to achieve the national goal.
1998 TN:	54.7 deaths per 100,000 for Tennessee blacks
2000 U.S. Target:	27 deaths per 100,000 for U.S. blacks
Status:	Tennessee must decrease the number of deaths per 100,000 by 51% to achieve the national goal.

REDUCE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) MORTALITY
(Healthy People 2000 Objective 3.3)

1998 TN:	25.4 deaths per 100,000 persons
2000 U.S. Target:	25 deaths per 100,000 persons
Status:	**Tennessee's rate is very close to the 2000 national target.**

REDUCE CIRRHOSIS MORTALITY
(Healthy People 2000 Objectives 4.2, 4.2a)
1998 TN: 7.6 deaths per 100,000 for Tennessee.
2000 U.S. Target: 6 deaths per 100,000 for the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 21% to achieve the national goal.

1998 TN: 14.4 deaths per 100,000 for black males in Tennessee.
2000 U.S. Target: 4.1 per 100,000 for black males in the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 72% to achieve the national goal.

REDUCE CANCER MORTALITY
(Healthy People 2000 Objectives 2.2, 2.2a)
1998 TN: 135.6 per 100,000 for Tennessee
2000 U.S. Target: 130 deaths per 100,000 for the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 4% to achieve the national goal.

1998 TN: 183.6 deaths per 100,000 for Tennessee blacks
2000 U.S. Target: 175 deaths per 100,000 for U.S. blacks
Status: Tennessee must decrease the number of deaths per 100,000 by 5% to achieve the national goal.

REDUCE LUNG CANCER MORTALITY
(Healthy People 2000 Objectives 3.2, 3.2a, 3.2b)
1998 TN: 45.3 deaths per 100,000 for Tennessee
2000 U.S. Target: 42 deaths per 100,000 for the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 7% to achieve the national goal.

1998 TN: 28.5 deaths per 100,000 for Tennessee females
2000 U.S. Target: 27 deaths per 100,000 for U.S. females
Status: Tennessee must decrease the number of deaths per 100,000 by 5% to achieve the national goal.

REDUCE FEMALE BREAST CANCER MORTALITY
(Healthy People 2000 Objectives 16.3, 16.3a)
1998 TN: 19.3 per 100,000 females
2000 U.S. Target: 20.6 deaths per 100,000 females
Status: Tennessee's rate is 6% lower than the 2000 national target. Tennessee has surpassed this goal.

REDUCE FEMALE BREAST CANCER MORTALITY (CONTINUED)

1998 TN: 25 deaths per 100,000 black females
2000 U.S. Target: 25 deaths per 100,000 black females
Status: Tennessee's rate is the same as that of the 2000 national target. Tennessee has met this goal.

REDUCE UTERINE/CERVICAL CANCER MORTALITY

(Healthy People 2000 Objectives 16.4, 16.4a)

1998 TN: 2.6 per 100,000 for Tennessee females
2000 U.S. Target: 1.3 deaths per 100,000 for U.S. females
Status: Tennessee must decrease the number of deaths per 100,000 by 50% to achieve the national goal.

1998 TN: 3.3 per 100,000 for black females in Tennessee
2000 U.S. Target: 3 deaths per 100,000 for black females in the U.S.
Status: Tennessee's rate is very close to the 2000 national target.

REDUCE CANCER OF THE ORAL CAVITY AND PHARYNX

(Healthy People 2000 Objectives 3.17, 3.17a, 3.17b)

1998 TN: 11.5 per 100,000 for males aged 45-74 in Tennessee
2000 U.S. Target: 10.5 deaths per 100,000 for males aged 45-74 in the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 9% to achieve the national goal.

1998 TN: 3.9 per 100,000 for females aged 45-74 in Tennessee.
2000 U.S. Target: 4.1 deaths per 100,000 for females aged 45-74 in the U.S.
Status: Tennessee's rate is 5% lower than the 2000 national target. Tennessee has surpassed this goal.

1998 TN: 26.1 deaths per 100,000 for black males aged 45-74 in Tennessee.
2000 U.S. Target: 26 deaths per 100,000 for black males aged 45-74 in the U.S.
Status: Tennessee's rate is very close to the national target.

1998 TN: 7.3 per 100,000 for black females aged 45-74 in Tennessee.
2000 U.S. Target: 6.9 deaths per 100,000 for black females aged 45-74 in the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 5.5% to achieve the national goal.

REDUCE HOMICIDE

(Healthy People 2000 Objectives 7.1, 7.1a, 7.1c, 7.1e)

1998 TN: 9.5 homicides per 100,000 for Tennessee
2000 U.S. Target: 7.2 homicides per 100,000 for the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 24% to achieve the national goal.

REDUCE HOMICIDE (CONTINUED)

1998 TN: 3.1 homicides per 100,000 for children under age 3 in Tennessee
2000 U.S. Target: 3.1 homicides per 100,000 for children under age 3 in the U.S.
Status: Tennessee has met this goal.

1998 TN: 106.8 homicides per 100,000 for black males aged 15-34 in Tennessee.
2000 U.S. Target: 72.4 homicides per 100,000 for black males aged 15-34 in the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 32% to achieve the national goal.

1998 TN: 16.8 homicides per 100,000 for black females aged 15-34 in Tennessee.
2000 U.S. Target: 16 homicides per 100,000 for black females aged 15-34 in the U.S.
Status: Tennessee must decrease the number of deaths per 100,000 by 5% to achieve the national goal.

REDUCE SUICIDE

(Healthy People 2000 Objectives 6.1, 6.1a, 6.1b, 6.1c)

1998 TN: 12.7 suicides per 100,000 persons.
2000 U.S. Target: 10.5 suicides per 100,000 persons.
Status: Tennessee must decrease the number of deaths per 100,000 by 17% to achieve the national goal.

1998 TN: 13 suicides per 100,000 youth aged 15-19.
2000 U.S. Target: 8.2 suicides per 100,000 youth aged 15-19.
Status: Tennessee must decrease the number of deaths per 100,000 by 37% to achieve the national goal.

1998 TN: 27.8 suicides per 100,000 males aged 20-34.
2000 U.S. Target: 21.4 suicides per 100,000 males aged 20-34.
Status: Tennessee must decrease the number of deaths per 100,000 by 23% to achieve the national goal.

1998 TN: 41 suicides per 100,000 white males aged 65 and older.
2000 U.S. Target: 39.2 suicides per 100,000 white males aged 65 and older.
Status: Tennessee must decrease the number of deaths per 100,000 by 4% to achieve the national goal.

REDUCE MORTALITY DUE TO UNINTENTIONAL INJURIES
(Healthy People 2000 Objectives 9.1, 9.1b, 9.1c)
1998 TN: 40.8 deaths per 100,000 persons.
2000 U.S. Target: 29.3 deaths per 100,000 persons.
Status: Tennessee must decrease the number of deaths per 100,000 by 28% to achieve the national goal.

1998 TN: 64.8 deaths per 100,000 black males.
2000 U.S. Target: 51.9 deaths per 100,000 black males.
Status: Tennessee must decrease the number of deaths per 100,000 by 20% to achieve the national goal.

1998 TN: 59.6 deaths per 100,000 white males.
2000 U.S. Target: 42.9 deaths per 100,000 white males.
Status: Tennessee must decrease the number of deaths per 100,000 by 28% to achieve the national goal.

REDUCE MORTALITY DUE TO MOTOR VEHICLE CRASHES
(Healthy People 2000 Objectives 9.3, 9.3a, 9.3b, and 9.3c)
1998 TN: 22 deaths per 100,000 persons.
2000 U.S. Target: 14.2 deaths per 100,000 persons.
Status: Tennessee must decrease the number of deaths per 100,000 by 35% to achieve the national goal.

1998 TN: 5.6 deaths per 100,000 children aged 14 and younger.
2000 U.S. Target: 4.4 deaths per 100,000 children aged 14 and younger.
Status: Tennessee must decrease the number of deaths per 100,000 by 21% to achieve the national goal.

1998 TN: 39 deaths per 100,000 youth aged 15-24.
2000 U.S. Target: 26.8 deaths per 100,000 youth aged 15-24.
Status: Tennessee must decrease the number of deaths per 100,000 by 31% to achieve the national goal.

1998 TN: 39 deaths per 100,000 persons aged 70 and older.
2000 U.S. Target: 20 deaths per 100,000 persons aged 70 and older.
Status: Tennessee must decrease the number of deaths per 100,000 by 49% to achieve the national goal.

REDUCE INFANT MORTALITY
(Healthy People 2000 Objectives 14.1, 14.1a)
1998 TN: 8.2 deaths per 1,000 live births.
2000 U.S. Target: 7 deaths per 1,000 live births.
Status: Tennessee must decrease the number of deaths per 1,000 live births by 15% to achieve the national goal.

REDUCE INFANT MORTALITY (CONTINUED)

1998 TN: 15.1 per 1,000 live births to black females.
2000 U.S. Target: 11 per 1,000 live births to black females.
Status: Tennessee must decrease the number of deaths per 1,000 live births by 27% to achieve the national goal.

REDUCE NEONATAL MORTALITY

(Healthy People 2000 Objectives 14.1d, 14.1e)

1998 TN: 5.6 deaths per 1,000 live births.
2000 U.S. Target: 4.5 deaths per 1,000 live births.
Status: Tennessee must decrease the number of deaths per 1,000 live births by 20% to achieve the national goal.

1998 TN: 10.9 deaths per 1,000 live births to black females.
2000 U.S. Target: 7 deaths per 1,000 live births to black females.
Status: Tennessee must decrease the number of deaths per 1,000 live births by 36% to achieve the national goal.

REDUCE POSTNEONATAL MORTALITY

(Healthy People 2000 Objectives 14.1g, 14.1h)

1998 TN: 2.6 deaths per 1,000 live births.
2000 U.S. Target: 2.5 deaths per 1,000 live births.
Status: Tennessee must decrease the number of deaths per 1,000 live births by 4% to achieve the national goal.

1998 TN: 4.2 deaths per 1,000 live births to black females.
2000 U.S. Target: 4 deaths per 1,000 live births to black females.
Status: Tennessee must decrease the number of deaths per 1,000 live births by 5% to achieve the national goal.

Note: All mortality rates are age-adjusted, except when a particular age-group is specified.
Source: Tennessee Department of Health, Death Certificate Data

PREGNANCY AND BIRTHS

REDUCE TEENAGE PREGNANCY
(Healthy People 2000 Objectives 5.1, 5.1a)
1998 TN: 48.2 per 1,000 females aged 15-17.
2000 TN Target: 55 per 1,000 females aged 15-17.
2000 U.S. Target: 50 per 1,000 females aged 15-17.
Status: Tennessee's rate is 4% lower than the 2000 national target. Tennessee has surpassed both the state and national goals.

1998 TN: 2 per 1,000 females aged 10-14.
2000 TN Target: 2.5 per 1,000 females aged 10-14.
Status: Tennessee has surpassed the state goal.

REDUCE TEENAGE PREGNANCY
1998 TN: 145.1 per 1,000 black females aged 15-19.
2000 U.S. Target: 120 per 1,000 black females aged 15-19.
Status: Tennessee must decrease the number of pregnancies per 1,000 females ages 15-19 by 17% to achieve the national goal.

REDUCE VERY LOW BIRTHWEIGHT
(Healthy People 2000 Objectives 14.5, 14.5a)
1998 TN: 1.7% of live births.
2000 U.S. Target: 1% of live births.
Status: Tennessee must decrease the percentage of live births that are very low birthweight by 41% to achieve the national goal.

1998 TN: 3.3% of live births to black females.
2000 U.S. Target: 2% of live births to black females.
Status: Tennessee must decrease the percentage of live births to black females that are very low birthweight by 39% to achieve the national goal.

REDUCE LOW BIRTHWEIGHT
(Healthy People 2000 Objectives 14.5, 14.5b)
1998 TN: 9.1% of live births.
2000 TN Target: 7.1% of live births.
2000 U.S. Target: 5% of live births.
Status: Tennessee must decrease the percentage of live births that are low birthweight by 22% to achieve the state goal. Tennessee must decrease the percentage of live births that are low birthweight by 45% to achieve the national goal.

REDUCE LOW BIRTHWEIGHT (CONTINUED)

1998 TN: 14.3% of live births to black females.
2000 U.S. Target: 9% of live births to black females.
2010 U.S. Target: Not established.
Status: Tennessee must decrease the percentage of live births that are low birthweight by 37% to achieve the national goal.

REDUCE CESAREAN SECTION DELIVERY RATE

(Healthy People 2000 Objective 14.8)

1998 TN: 22.8 Cesarean sections per 100 deliveries.
2000 U.S. Target: 15 Cesarean sections per 100 deliveries.
Status: Tennessee must decrease the number of Cesarean section births per 100 deliveries by 34% to achieve the national goal.

INCREASE ABSTINENCE FROM TOBACCO USE DURING PREGNANCY

(Healthy People 2000 Objective 14.10)

1998 TN: 83.2% of mothers abstained from using tobacco during pregnancy.
2000 U.S. Target: 90% of mothers abstaining from using tobacco during pregnancy.
Status: Tennessee must increase the percentage of mothers abstaining from tobacco use during pregnancy by 8% to achieve the national goal.

INCREASE ABSTINENCE FROM ALCOHOL USE DURING PREGNANCY

(Healthy People 2000 Objective 14.10)

1998 TN: 99.1% of mothers abstained from using alcohol during pregnancy.
2000 U.S. Target: 95% of mothers abstaining from using alcohol during pregnancy.
Status: Tennessee has surpassed this goal.

Source: Tennessee Department of Health and Health Information Tennessee Web site (**server.to/hit**), CHRG-TDH 1999.

BEHAVIORAL RISK FACTORS

ADULTS

REDUCE PREVALENCE OF CIGARETTE SMOKING

(Healthy People 2000 Objectives 3.4, 3.4d)

1998 TN: 26% cigarette smoking prevalence among adults aged 18 and older.
2000 U.S. Target: 15% cigarette smoking prevalence among adults aged 18 and older.
Status: Tennessee must reduce the prevalence of cigarette smoking among adults by 42% to achieve the national goal.

1998 TN: 30% cigarette smoking prevalence among blacks aged 18 and older.
2000 U.S. Target: 18% cigarette smoking prevalence among blacks aged 18 and older.
Status: Tennessee must reduce smoking prevalence among blacks aged 18 and older by 40% to achieve the national goal.

INCREASE INFLUENZA IMMUNIZATION

(Healthy People 2000 Objectives 20.11)

1998 TN: 70% of noninstitutionalized adults aged 65 and over received flu immunization during the previous 12 months.
2000 U.S. Target: 60% of noninstitutionalized adults aged 65 and over are immunized during the previous 12 months.
Status: Tennessee's flu immunization rate is 17% higher than the 2000 national target. Tennessee has surpassed this goal.

INCREASE PNEUMONIA IMMUNIZATIONS

(Healthy People 2000 Objective 20.11)

1998 TN: 51% of noninstitutionalized adults aged 65 and over received a pneumonia vaccination.
2000 U.S. Target: 60% of noninstitutionalized adults aged 65 and over received a pneumonia vaccination.
Status: Tennessee must increase the proportion of noninstitutionalized adults aged 65 and over receiving a pneumonia vaccination by 18% to achieve the national goal.

INCREASE CHOLESTEROL CHECKING

(Healthy People 2000 Objective 15.14)

1998 TN: 75% of adults had their blood cholesterol checked within the past five years.
2000 U.S. Target: 75% of adults to have their blood cholesterol checked within the past five years.
Status: Tennessee's rate is the same as the 2000 national target. Tennessee has met this goal.

INCREASE CLINICAL BREAST EXAMS AND MAMMOGRAMS

(Healthy People 2000 Objectives 16.11, 16.11d)

1998 TN: 71% of females aged 50 and older had received a clinical breast exam and mammogram within the past two years.

2000 U.S. Target: 60% of females aged 50 and older had received a clinical breast exam and a mammogram within the past two years.

Status: Tennessee's 2 year mammogram prevalence is higher than the 2000 national target. Tennessee surpassed this goal.

INCREASE PAP SMEAR TESTS

(Healthy People 2000 Objective 16.12)

1998 TN: 93% of females aged 18 and older have received a Pap smear test in their lifetime.

2000 U.S. Target: 95% of females aged 18 and older have received a Pap smear test in their lifetime.

Status: Tennessee must increase the proportion of females aged 18 and older who have received a Pap smear test in their lifetime by 2% to achieve the national goal.

INCREASE REGULAR VIGOROUS PHYSICAL ACTIVITY

(Healthy People 2000 Objective 1.4)

Leisure-time physical activity for 20 minutes or more, 3 or more times/week, at 50% or more capacity.

1998 TN: 10% of adults aged 18 and older engaged in regular vigorous physical activity.

2000 U.S. Target: 20% of adults aged 18 and older engaging in regular vigorous physical activity.

Status: Tennessee must increase the proportion of adults engaging in regular vigorous physical activity by 100% to reach the national goal.

REDUCE PHYSICAL INACTIVITY (NO LEISURE-TIME PHYSICAL ACTIVITY)

(Healthy People Objectives 1.5, 1.5a, 1.5d)

1998 TN: 36% of adults aged 65 and older engaged in no physical activity.

2000 U.S. Target: 22% of adults aged 65 and older engaged in no physical activity.

Status: Tennessee must reduce the proportion of adults aged 65 and older engaged in no physical activity by 39% to meet the national target.

Sources: 1998 Behavioral Risk Factor Surveillance System (BRFSS) Summary Prevalence Report (CDC), based on weighted data.

YOUTH HEALTH OBJECTIVES

INCREASE REGULAR VIGOROUS PHYSICAL ACTIVITY

(Healthy People 2000 Objective 1.4)

1999 TN:	63% of students in grades 9-12 in regular vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
2000 U.S. Target:	75% of students in grades 9-12 in the U.S. engage in regular vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
Status:	Tennessee must increase the proportion of students engaged in regular vigorous physical activity by 19% to meet the national goal.

REDUCE HEAVY DRINKING

(Healthy People 2000 Objective 4.7)

1999 TN:	34% heavy drinking among high school seniors. Heavy drinking is defined as consuming 5 or more alcoholic beverages per occasion within the past two weeks.
2000 U.S. Target:	28% heavy drinking among high school seniors.
Status:	Tennessee must decrease the proportion of students engaged in heavy drinking by 18% to meet the national goal.

REDUCE USE OF ANABOLIC STEROIDS

(Healthy People 2000 Objective 4.11)

1999 TN:	13% among male high school seniors.
2000 U.S. Target:	3% anabolic steroid use among male high school seniors.
Status:,	Tennessee must decrease the proportion of high school seniors using anabolic steroids by 77% to meet the national goal.

Note: 1999 Youth Risk Behavior Survey data are weighted and representative, but do not include data from the Nashville school districts.

Source: 1999 Tennessee State Department of Education Youth Risk Behavior Survey Results.

COMMUNICABLE DISEASES

REDUCE GONORRHEA

(Healthy People 2000 Objective 19.1)

1998 TN: 218 cases of gonorrhea per 100,000 persons

2000 U.S. Target: 100 cases of gonorrhea per 100,000 for the U.S.

Status: Tennessee must decrease the number of cases of gonorrhea per 100,000 persons by 54% to meet the national goal.

REDUCE PRIMARY AND SECONDARY SYPHILIS

(Healthy People 2000 Objective 19.3)

1998 TN: 10.4 cases of syphilis per 100,000 persons

2000 U.S. Target: 4 cases of syphilis per 100,000 for the U.S.

Status: Tennessee must decrease the number of cases of syphilis per 100,000 persons by 62% to meet the national goal.

REDUCE TUBERCULOSIS (TB)

(Healthy People 2000 Objective 20.4)

1998 TN: 8.1 cases of TB per 100,000

2000 U.S. Target: 3.5 cases of TB per 100,000

2000 TN Target: 9.5 cases of TB per 100,000

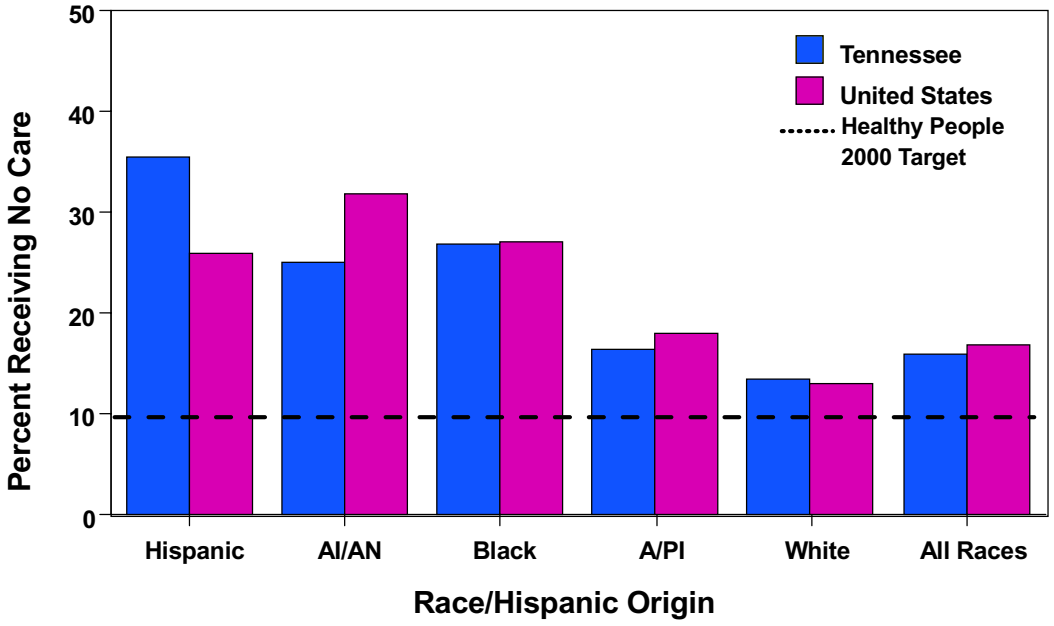
Status: Tennessee must decrease by 57% the number of cases of TB per 100,000 people to meet the national goal. While not meeting the 2000 national target, Tennessee surpassed its state goal to reduce the rate of tuberculosis to no more than 9.5 cases per 100,000.

Source: Summary of Notifiable Diseases, United States, 1998. *Morbidity and Mortality Weekly Report*, CDC, December 31, 1999, 47(53); 1-93.

Source of U.S. Goals: *Healthy People 2000: Healthy People 2000 Review, 1997*. National Center for Health Statistics, Hyattsville, MD: 1997.

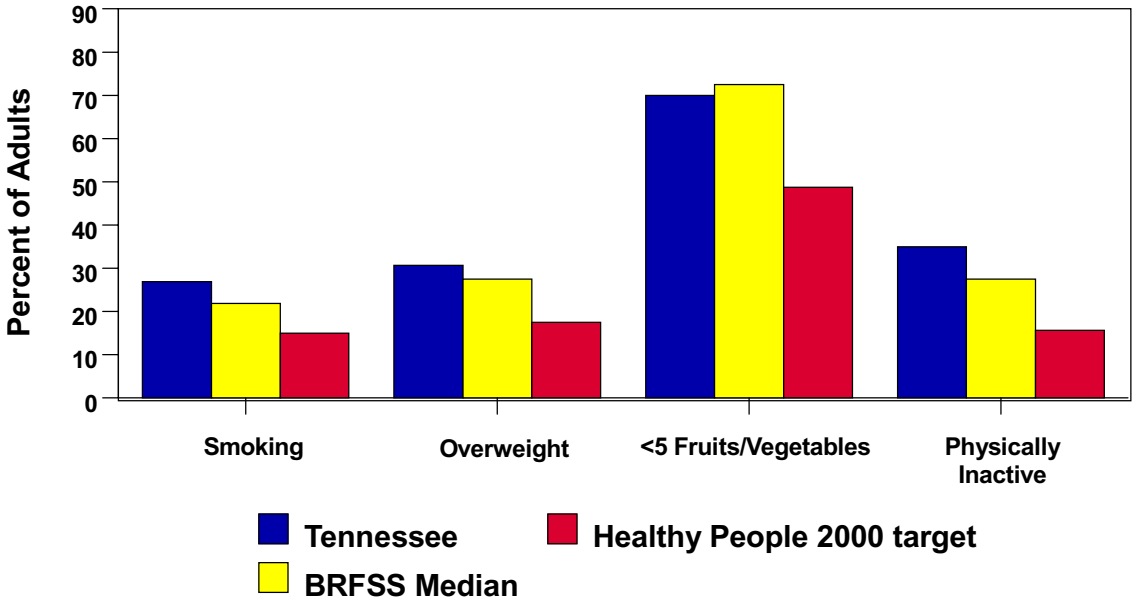
Source of Tennessee's State Goals: *Tennessee's Healthy People 2000*. Tennessee Department of Health, Health Statistics and Information, Nashville, TN: 1996.

Percent of Women Who Did Not Receive Prenatal Care in the First Trimester of Pregnancy by Race and Hispanic Origin Tennessee and United States, 1995-97



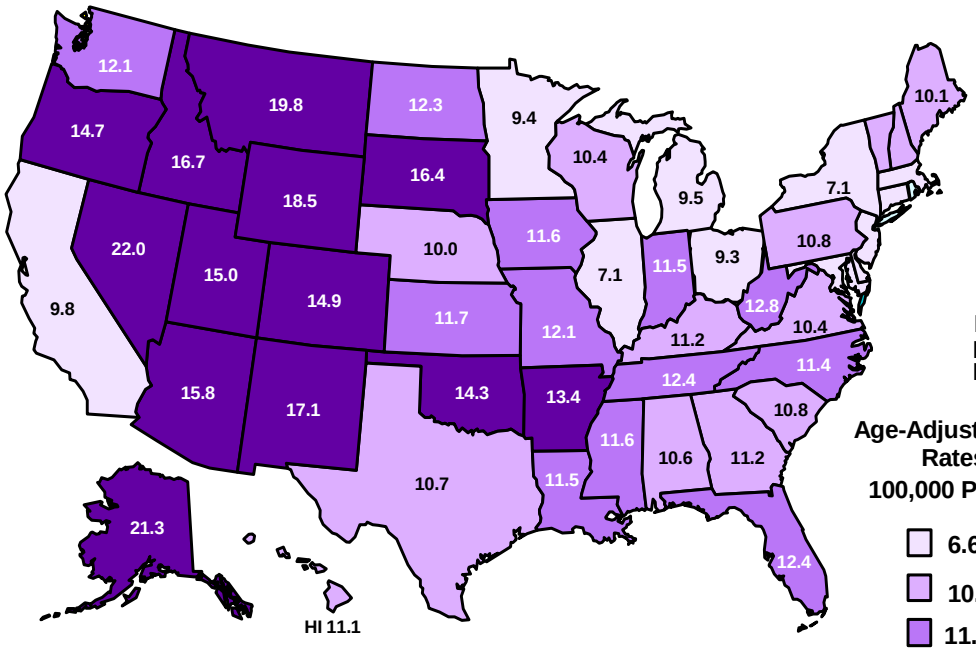
Note: AI/AN = American Indian/Alaskan Native; Black = Black Non-Hispanic; A/PI = Asian/Pacific Islander; White = White Non-Hispanic.
Source: Tennessee State Health Profile, 2000, CDC.

Total Cardiovascular Disease: Behavioral Risk Factors Tennessee and BRFSS Median, 1998



Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC, and Tennessee Department of Health.

Suicide Rates, 1997



NH - 10.6
VT - 11.0
MA - 7.4
RI - 7.1
CT - 7.1
NJ - 6.6
MD - 9.3
DE - 10.8
DC - 7.0

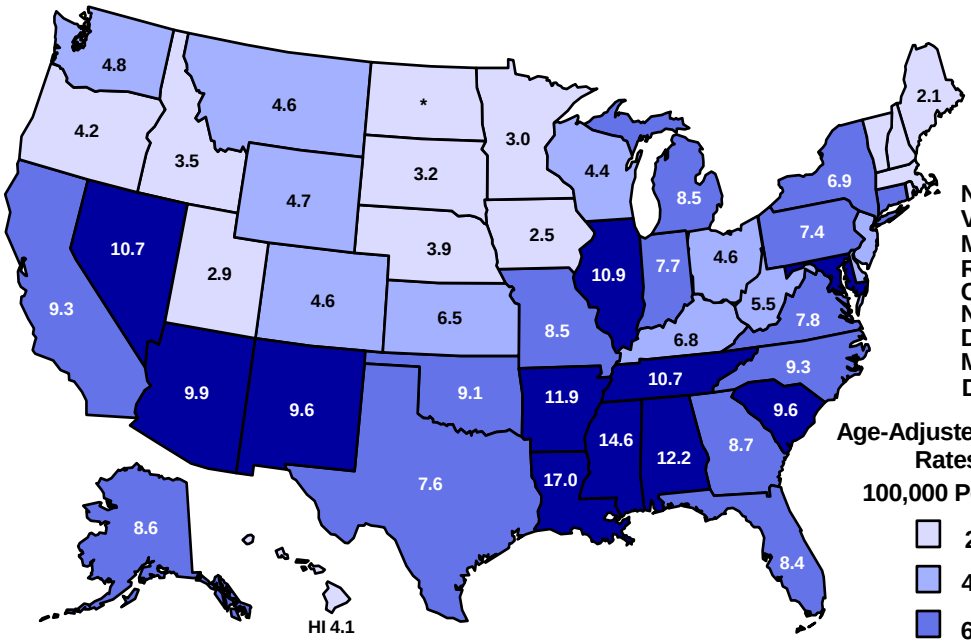
Age-Adjusted Suicide Rates Per 100,000 Population

- 6.6 - 9.9
- 10.0 - 11.2
- 11.3 - 12.8
- 12.9 - 22.0

Tennessee - 12.4; United States - 10.6
Healthy People 2000 Target - 10.5

Source: Tennessee State Health Profile, 2000, CDC.

Homicide Rates, 1997



NH - 2.2
VT - *
MA - 2.5
RI - 3.1
CT - 4.6
NJ - 5.1
DE - 4.6
MD - 11.9
DC - 61.7

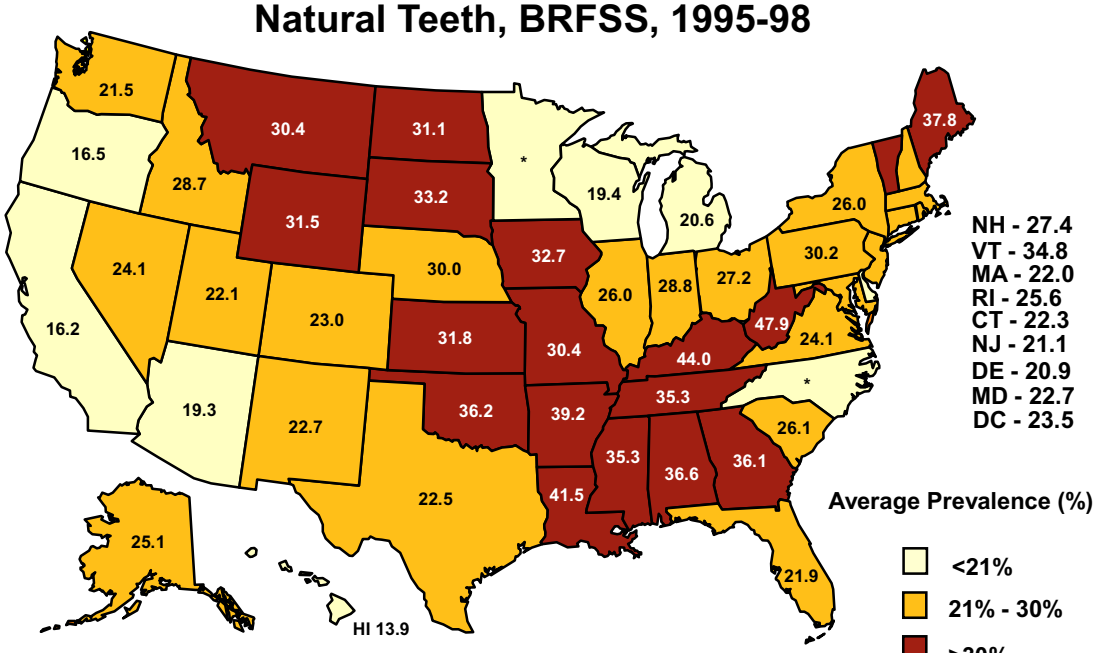
Age-Adjusted Homicide Rates Per 100,000 Population

- 2.1 - 4.2
- 4.3 - 6.8
- 6.9 - 9.3
- 9.4 - 61.7

Tennessee - 10.7; United States - 7.8
Healthy People 2000 Target - 7.2

*This rate is based on fewer than 20 deaths and is considered unreliable.
Source: Tennessee State Health Profile, 2000, CDC.

Adults Aged 65 and Older Who Have Lost All Natural Teeth, BRFSS, 1995-98



Tennessee - 35.3; United States - 26.7
Health People 2000 Target - 20.0

*Data not available.
Source: Tennessee State Health Profile, 2000, CDC.

COMMUNICABLE DISEASES, TENNESSEE, 1998 and 1999

Comparison of Selected Communicable Disease Rates, Tennessee and the United States, 1998

- The most common communicable diseases in Tennessee were chlamydia and gonorrhea. The rates of these diseases in 1998 were 252.6 and 218.0 per 100,000 population, respectively (see table below).

- In 1998, of the communicable diseases selected for comparison, AIDS was the only disease which had a rate lower in Tennessee than in the U.S. (12.8 cases per 100,000 population compared to 17.2 cases, respectively).

- While the rate of AIDS has been decreasing steadily in Tennessee since 1995 (17.1 cases per 100,000 population in 1995, 15.5 in 1996, 14.6 in 1997, and 12.8 in 1998), the decline does not appear to be occurring as rapidly in Tennessee as it is in the U.S. overall. Consequently, the difference between the rates in Tennessee and the U.S. was lower in 1998 than the difference in rates in the previous two years. In 1998, Tennessee's AIDS rate was only 25.6% lower than the U.S. rate. The former was to 33% lower in 1997 and 38% lower in 1996 than the latter.

- The rates for all other sexually transmitted diseases (STDs) selected for comparison were higher in Tennessee than the U.S. The differences ranged from 12.9% higher for chlamydia to 144.7% higher for hepatitis C (see table).

- Also notably higher was syphilis, which occurred in Tennessee at a rate more than twice that of the national average (32.2 cases per 100,000 population compared to 14.1 cases, respectively). In fact, the rate of primary and secondary syphilis alone was 4 times higher in Tennessee than in the U.S. (10.4 cases per 100,000 population compared to 2.6 cases, respectively).

- Tuberculosis, one of the more important infectious diseases in this era of increasing antibiotic resistance, was 19% higher in Tennessee than in the U.S. as a whole (8.1 cases per 100,000 compared to 6.8 cases, respectively).

- Since 1997, the rates of AIDS, hepatitis B and C, syphilis, and tuberculosis decreased in both Tennessee and the U.S. In Tennessee, hepatitis B and C and syphilis demonstrated the most dramatic changes, decreasing by 36.4%, 33.3%, and 27.1%, respectively. Chlamydia and gonorrhea increased over the one-year period by 8.5% and 6.2%, respectively.

Source: Summary of Notifiable Diseases, United States, 1998. *Morbidity and Mortality Weekly Report*, CDC, December 31, 1999, 47(53); 1-93.

SELECTED COMMUNICABLE DISEASES, TENNESSEE AND THE U.S., 1998

Selected Diseases	U.S.		Tennessee		Difference in rate
	N	Rate[1]	N	Rate[1]	
AIDS	46,521	17.2	695	12.8	25.6% Lower
Chlamydia	604,420	223.6	13,717	252.6	12.9% Higher
Gonorrhea	355,642	131.6	11,840	218.0	65.7% Higher
Hepatitis B	10,258	3.8	294	5.4	42.1% Higher
Hepatitis C	3,518	1.3	173	3.2	146.2% Higher
Syphilis, All Forms	37,977	14.1	1,750	32.2	128.4% Higher
Tuberculosis	18,361	6.8	439	8.1	19.1% Higher
Population, 1998	270,296,000		5,431,000		

[1]Rate represents number of reported cases per 100,000 population.
Source: Summary of Notifiable Diseases, United States, 1998. *Morbidity and Mortality Weekly Report*, CDC, December 31, 1999, 47(53); 1-93.

Communicable Diseases: Regional[11] Differences, Tennessee, 1999

Chlamydia

- The rate of chlamydia has remained relatively stable from 1995 to 1999, with the lowest rate in 1997, 232.9 cases per 100,000.
- In 1999, the chlamydia rate was over 3 times higher in metropolitan regions than in nonmetropolitan regions (427.5 cases per 100,000 compared to 133.3 cases, respectively).
- Among metropolitan regions, Shelby County had the highest rate of chlamydia in 1999, at 572.7 cases per 100,000, while Sullivan County had the lowest, at 92.5 cases per 100,000.

[11]Regions are based on the Tennessee Department of Health Administrative Regions, with two notable exceptions. The West Tennessee Region includes both the Northwest and Southwest TDH Administrative Regions. In addition, for the analysis of tuberculosis, the metropolitan Madison County is included in the West Tennessee Region.

- Among nonmetropolitan regions, the Mid-Cumberland Region had the highest rate of chlamydia (128.2 cases per 100,000). The Northeast Region had the lowest chlamydia rate (66.6 per 100,000).

Gonorrhea

- The rate of gonorrhea has declined by 26% between 1995 and 1999, from 276.2 cases per 100,000 in 1995 to 205.7 cases per 100,000 in 1999.

- In 1999, the rate was over 5 times higher in metropolitan regions than in nonmetropolitan regions (387.9 cases per 100,000 compared to 73.0 cases, respectively).

- Among metropolitan regions, Shelby County had the highest rate of gonorrhea, at 574.0 cases per 100,000, while Sullivan County had the lowest, at 29.3 cases per 100,000.

- Among nonmetropolitan regions, West Tennessee had the highest rate of gonorrhea (154.8 cases per 100,000). The Upper Cumberland Region had the lowest gonorrhea rate (11.7 per 100,000).

Hepatitis B

- Between 1995 and 1999, the statewide rates of hepatitis B have consistently fallen, from 9.7 cases per 100,000 population (1995) to 4 cases per 100,000 (1999). This represents a 59% decline over the five-year period.

- In 1999, the hepatitis B rate was 3.5 times higher in metropolitan regions than in nonmetropolitan regions (6.8 cases per 100,000 compared to 1.9 cases, respectively).

- Among metropolitan regions, Shelby County had the highest rate of hepatitis B, at 11.2 cases per 100,000, while Sullivan County had the lowest, at 2.0 cases per 100,000.

- Among nonmetropolitan regions, the South Central Region had the highest rate of hepatitis B (3.8 cases per 100,000). The Southeast Region had the lowest hepatitis B rate (0.7 per 100,000).

Hepatitis C

- The statewide rate of hepatitis C has fallen from 4.5 cases per 100,000 population in 1997 to 1.8 cases per 100,000 in 1999, representing a 56% decline over the three-year period.

- In 1999, the hepatitis C rate was twice as high in metropolitan regions compared with nonmetropolitan regions (2.9 cases per 100,000 compared to 1.4 cases, respectively).

- Among metropolitan regions, Hamilton County had the highest rate of hepatitis C, at 8.1 cases per 100,000, while Knox County had the lowest, at 0.5 cases per 100,000.

- Among nonmetropolitan regions, the Southeast Region had the highest rate of hepatitis C (3.9 cases per 100,000). The East Tennessee Region had the lowest hepatitis C rate (0.5 per 100,000).

Syphilis

- The rate of syphilis has declined by 27% from 43.5 cases per 100,000 in 1996 to 31.6 cases per 100,000 in 1999.

- In 1999, the syphilis rate was over 14 times higher in metropolitan regions than in nonmetropolitan regions (68.5 cases per 100,000 compared to 4.8 cases, respectively).

- Among metropolitan regions, Shelby County had the highest rate of syphilis, at 106.1 cases per 100,000, while Sullivan County had the lowest, at 0.7 cases per 100,000.

- Among nonmetropolitan regions, West Tennessee had the highest rate of syphilis (17.9 cases per 100,000). The Northeast Region had the lowest syphilis rate (0.3 per 100,000).

Tuberculosis

- Between 1996 and 1999, the statewide rates of tuberculosis have consistently fallen from 9.5 cases per 100,000 population (1996) to 7 cases per 100,000 (1999). This represents a decline of 26% over the four-year period.

- In 1999, the TB rate was 81% higher in metropolitan regions than in nonmetropolitan regions (9.4 cases per 100,000 compared to 5.2 cases, respectively). This difference is considerably less than in 1997, when metropolitan regions had nearly twice as many cases as nonmetropolitan regions.

- Among metropolitan regions, Davidson County had the highest rate of tuberculosis, at 11.3 cases per 100,000, while Sullivan County had the lowest, at 6.0 cases per 100,000.

- Among nonmetropolitan regions, Upper Cumberland and the South Central Regions shared the highest rate of tuberculosis (8.3 cases per 100,000). West Tennessee had the lowest tuberculosis rate (3.4 per 100,000).

HIV

- In 1999, the overall reported incidence[12] of HIV in Tennessee was 14.3 cases[13] per 100,000 population, representing 784[14] cases of HIV reported in the State.

- In metropolitan areas, however, the rates were considerably higher. Shelby and Davidson Counties were the counties with the highest rates of HIV, at 41.3 and 32.1 cases per 100,000, respectively. Overall, the metropolitan counties had a rate of 27.2 cases per 100,000, while the nonmetropolitan regions' rate was 4.5 cases per 100,000.

- Although there were several counties in which no new HIV cases were reported, HIV was present in every region of the state.

AIDS

- In 1999, the overall reported incidence of AIDS in Tennessee was 11.2 cases per 100,000 population, representing 613[14] cases of AIDS reported in the State. This incidence represents a decline of 18% from the rate in 1998 (13.7 cases per 100,000 population).

- In metropolitan regions, the AIDS rate was five times that of the rate in nonmetropolitan regions (20.1 cases per 100,000 population compared to 4.4 cases, respectively).

- AIDS rates by county were very similar to the rates of HIV, with a few notable exceptions most likely due to calculations involving small numbers. While Shelby and Davidson Counties had the highest total number of new AIDS cases (238 and 144, respectively), the counties with the highest rates were Haywood and Decatur Counties, at 44.2 and 27.1 cases per 100,000, respectively. These counties have relatively small populations, however, and the rates may therefore be unstable.

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[12]Due to the lag between infection and initial diagnosis of HIV, not all new HIV cases are reported in a timely manner, and these disease rates are likely to underestimate the true incidence of HIV in Tennessee

[13]The cases included here were initially reported HIV only; some may have converted to AIDS by the conclusion of the reporting period.

[14]Represents cases diagnosed in 1999 and reported through May, 2000.

! As with HIV, although AIDS was present in every region of the state, there were several counties in which no new AIDS cases were reported.

Sources: Tennessee Department of Health, Surveillance Program, TB Control Program, and Division of HIV/AIDS Surveillance.

An Overview of HIV and AIDS in Tennessee Through 1999

! From 1982 through 1999, there were 8,180 Tennesseans with HIV disease that progressed to AIDS and have been reported. Of these persons, 4,269 are currently living with AIDS. Another 5,429 Tennesseans have been reported with HIV only (not AIDS) since HIV reporting began in 1992.

! Comparisons of HIV-only cases to AIDS cases indicate increased disease among women, blacks, and persons at risk due to heterosexual intercourse or needle sharing related to injecting drug use. Of the 784 new cases of HIV in Tennessee in 1999, 233 (30%) were females, and 511 (65%) were black. While gender and race are not a risk for becoming HIV infected, they may be associated with other factors that increase an individual's risk of infection.

! Of these 784 persons, 603 have an identified risk as follows: 319 (41%) are men having sex with men; 177 (23%) are heterosexual intercourse; 79 (10%) are needle sharing related to injecting drug use; 19 (3%) are men having sex with men and injecting drug use combined; 8 (1%) are infants born to HIV infected mothers; and 1 (<1%) is related to receiving blood products.

! HIV continues to impact teens and young adults. Approximately 1 in 5 (18%) Tennesseans reported with an HIV infection diagnosis in 1999 was between the ages of 13 and 25 at the time of their diagnosis. Persons testing HIV positive in their early 20s were possibly infected as teens.

! Prior to 1995, deaths due to AIDS were increasing substantially each year, resulting in AIDS being a leading cause of death for young adults. In 1995, deaths due to AIDS peaked in Tennessee at 529 deaths. From 1996 through 1998, numbers of deaths due to AIDS declined annually as follows: 1996=406, 1997=286, and 1998=225. These overall declines are due to 1) better HIV intervention programs which have overall slowed the growth of the epidemic, and 2) advances in medical treatments that slow the progression of HIV disease and prevent opportunistic infections. However, provisional mortality data for 1999 indicate 254 deaths due to AIDS, which is a 13% increase in AIDS-related deaths over 1998.

! Recent estimates of HIV prevalence indicate 10,000 to 12,000 Tennesseans living with HIV through 1999. These figures include all persons currently infected with HIV and those living with AIDS. A "best guess" for new HIV infections occurring each year (i.e., incidence) in Tennessee continues to be approximately 1,000. With stable

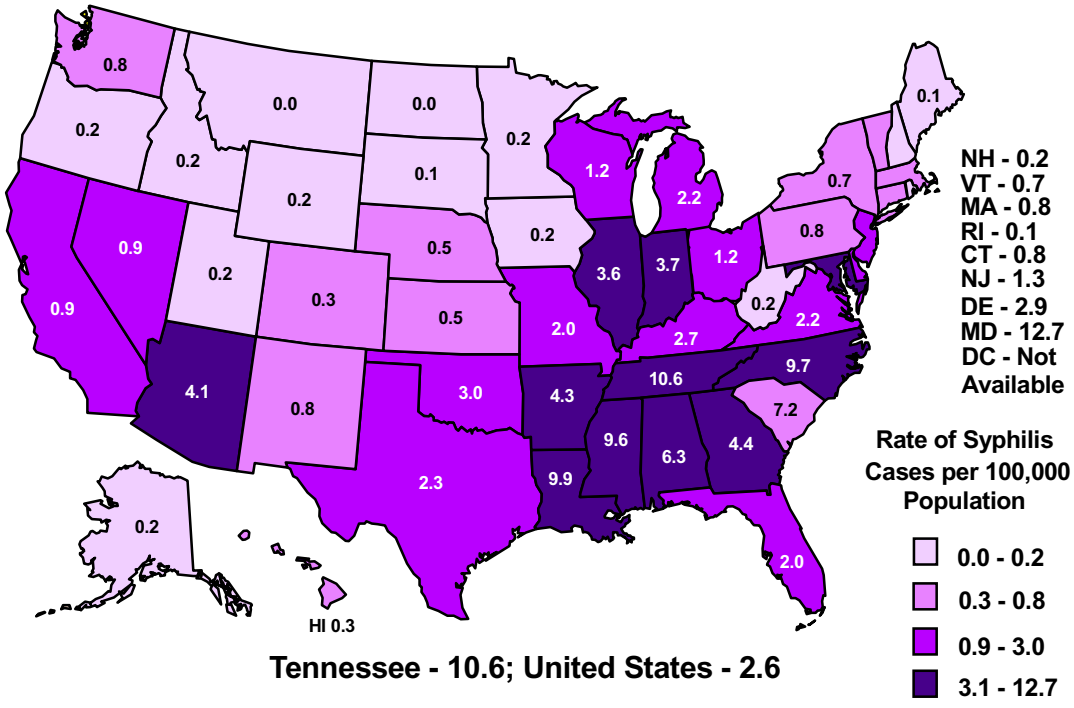
HIV incidence, and with persons with HIV disease living healthier and longer, gradual increases in HIV prevalence are likely over the next few years.

! Data collected for infants developing HIV/AIDS due to perinatal exposure (i.e., being born to an HIV-infected mother) suggest a decline in the number of new cases being diagnosed. Numbers of infected infants, by year of birth, and reported through May 2000, are as follows: 1993=15, 1994=8, 1995=5, 1996=3, 1997=7, 1998=4, and 1999=3. For the five-year period 1989 through 1993, the average number of births per year to HIV-infected infants with perinatal exposure is 10.8 births per year for reporting through May 2000. For the five-year period 1994 through 1998, this average has declined to 5.4 births per year based on reporting through May 2000. These declines are due to expanded voluntary HIV counseling and testing of all pregnant women and to advances in medical care, including use of anti-retrovirals, for HIV-infected pregnant women and their perinatally-exposed infants.

! In summary, improved HIV intervention programs and medical treatments for persons with HIV disease continue to support beneficial changes resulting in trends including: 1) decreases in new diagnoses of opportunistic infections, 2) overall decreases in AIDS-related deaths, 3) decreases in infants developing HIV infection as a result of being born to an HIV infected mother, and 4) a leveling of AIDS incidence (i.e., new cases of AIDS diagnosed each year). While numbers of cases for some categories have increased during 1999 when compared to 1998 figures, this increase appears attributable to short-term statistical fluctuation rather than a change in trend.

Source: "AIDS/HIV Update" in *Epi-News*, a Tennessee Department of Health publication; TDH STD/HIV Program, HIV/AIDS Surveillance Section. For more information, please contact: Herb Stone, 615-532-8495 or hstone@mail.state.tn.us.

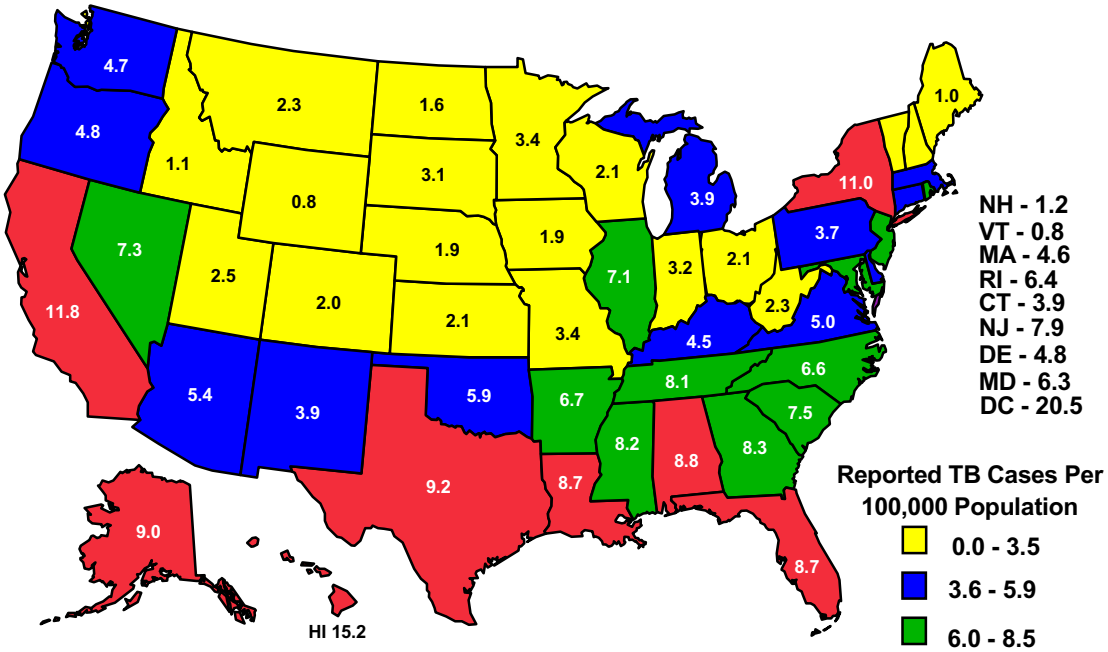
Reported Cases of Syphilis (Rate per 100,000 Population), 1998



Tennessee - 10.6; United States - 2.6

Source: Sexually Transmitted Disease Surveillance Report, 1998, CDC.

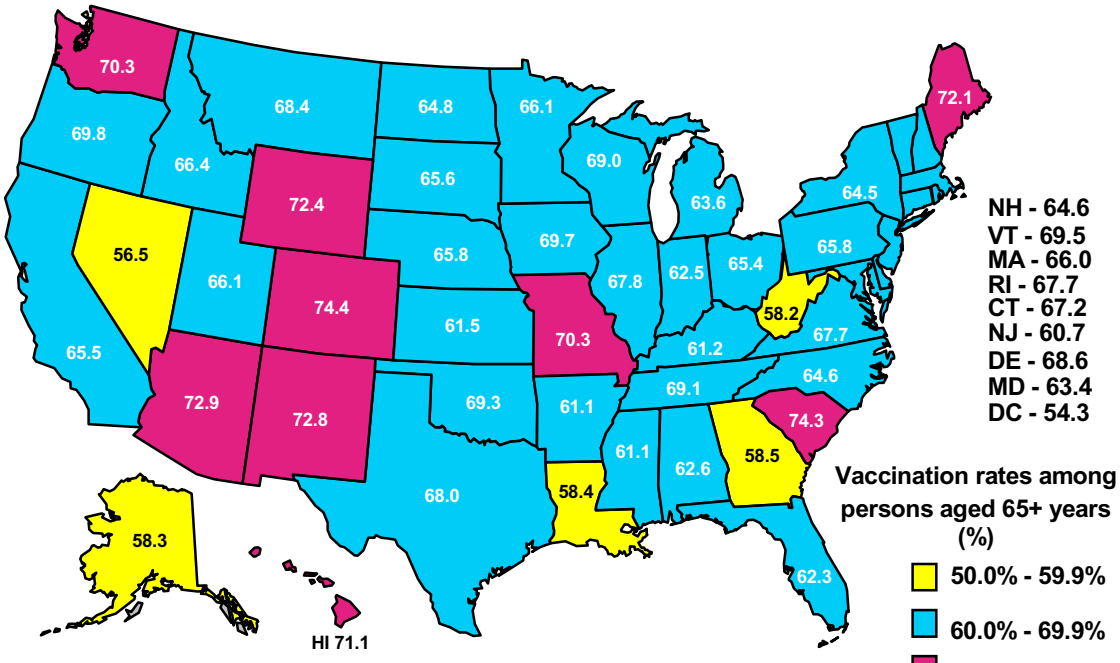
Tuberculosis Case Rates, 1998



Tennessee - 8.1; United States - 6.8
Healthy People 2000 Target - 3.5

Source: Tennessee State Health Profile, 2000, CDC.

Adult Vaccination Coverage for Influenza among Persons Aged 65 Years and Over, 1997



Tennessee - 69.1; United States - 66.0%; Healthy People 2000 Target - 60%

Source: Tennessee State Health Profile, 2000, CDC.

MOTOR VEHICULAR CRASH RATES IN TENNESSEE, 1990-1997

- Total crash rates in Tennessee have risen from 2,876 per 100,000 population in 1990 to 3,157.2 per 100,000 in 1997. This represents an increase of about 9.8%.

- Injury crash rates rose slightly (by 3.2%) from 1,487.4 per 100,000 in 1990 to 1,534.8 in 1997. However, fatal crash rates declined by 5.4% from 24.1 per 100,000 in 1990 to 22.8 in 1997, with the most marked decline from 1995 to 1997.

- Total crash rates were about one-third higher in metropolitan regions (3,874.6) than in nonmetropolitan regions (2,612.3) in 1997. Injury crash rates were also nearly one-third (31%) higher in metropolitan regions, at 1,857 per 100,000 compared to 1,290.1 in nonmetropolitan regions. However, fatal crash rates were substantially higher in nonmetropolitan regions of Tennessee in 1997, at 26.1 per 100,000 population, compared to 18.5 for metropolitan regions. This represents a differential of 29%.

- The declines in fatal crash rates were accompanied by a corresponding decline in motor vehicle crash death rates from death certificate data. Crash death rates based on that data source declined from 24.8 per 100,000 in 1990 to 22.4 in 1998. The decline from 1995 to 1998 was especially marked, from 24.6 in 1995 and 23.4 in 1997 to 22.4 in 1998.

- Counties with the highest total crash rates include Davidson (4,239), followed closely by Hamilton (4,232), Madison, Knox, Sevier and Shelby counties. The highest injury crash rates were observed for Davidson and Shelby Counties (2,182 and 1,931, respectively).

- Counties with the highest fatal crash rates in 1997 were McNairy (79.7), Polk (75.7) and Haywood (70.3), while counties with the lowest fatal crash rates were Gibson and Benton, both at 6.2, and Macon at 5.7 per 100,000.

- Passenger fatality rates have remained fairly stable over time. In 1997, these rates were higher in nonmetropolitan areas, at 6.9, compared to 4.2 for metropolitan areas and 5.7 statewide. Counties with the highest passenger fatality rates were Pickett (44), Grundy (37.4) and Stewart (31.6) in 1997.

- Pedestrian fatality rates were nearly three times higher in metropolitan regions (2.94 per 100,000) than in nonmetropolitan regions (1.28). The statewide pedestrian fatality rate was 2 per 100,000 in 1997.

- Counties with the highest pedestrian fatality rates were rural counties, namely, Grundy (7.2), Chester (7.0) and Tipton (6.6). However, metropolitan counties, like Shelby, Madison and Hamilton, had a relatively high prevalence of pedestrian fatalities at 3.9, 3.5 and 3.4 per 100,000 population, respectively.

! The majority of crashes in Tennessee involves no injury or fatality, but only property damage. More than two-thirds (68.3%) of crashes in 1997 resulted in property damage, compared to 31% resulting in injury and the remaining 0.7% resulting in fatalities.

! Over the eight years from 1990 to 1997, the percentage of crashes resulting in injury has remained relatively constant at 31%-33% and was similar in metropolitan and nonmetropolitan regions.

! The percentage of crashes with property damage only has risen slightly from 66.2% in 1990 to 68.4% in 1997. In metropolitan regions, property damage crashes rose from 66.8% to 69.2% of all crashes from 1990 to 1997, while the increase in nonmetropolitan regions was from 65.4% to 67.5% in that time period.

! The percentage of crashes resulting in fatalities declined slightly from 0.75% in 1990 to 0.65% in 1997, with the greatest decline in nonmetropolitan areas. Nonmetropolitan regions have twice as high proportions of crashes that are fatal as do metropolitan areas (0.89% compared to 0.44%, respectively). In 1990, the proportions of fatal crashes were 1.08% and 0.46% for respective categories of regions.

! Based on police reports, speed was a factor in about 4.9% of crashes in 1997, a decrease from 6.2% in 1997. Speed was more likely to be reported as a contributing factor in crashes in nonmetropolitan regions (5.8%) than in metropolitan regions (4% of crashes).

- Grundy, Hancock and Bledsoe Counties had the highest prevalence of speed-related crashes reported by police in 1997 (see bar chart), at 19.4%, 18.2% and 15.8%, respectively. Shelby was among the counties with the lowest prevalence of speed-related crashes, at 2.7%, along with Meigs, Hickman and Morgan Counties.

- Weather was recorded as a factor in 7.1% of crashes in 1997, but was 8.5% in 1990. Weather was more likely to be recorded as a factor in nonmetropolitan crashes (8.6%) than in metropolitan crashes (5.7%).

- Counties with the highest prevalence of weather-related crashes in 1997 were Loudon (18.1%), Marion (16.7%) and Grundy (16.1%). Shelby County had the lowest prevalence of such crashes at 3.9%.

! Late-night crashes, defined as those occurring between 9 p.m. and 2:59 a.m., decreased from 1990 to 1997 statewide, from 17.8% to 14.4% of all crashes. The decline for both metropolitan and nonmetropolitan regions was 19% over the period. Late-night crashes declined from 16.2% to 13.1% of crashes for metropolitan areas and from 19.7% to 16% for nonmetropolitan crashes.

- Counties with the highest prevalence of late-night crashes are Cocke at about one-third (33.5%) of crashes, Houston (32.9%) and Dickson (30.1%). Those with the lowest are Marion (11%), Polk (10.6%) and Claiborne (9.2%) Counties. Shelby County is the metropolitan area with the lowest late-night crash prevalence at 12.3%.

! The majority of late-night crashes involved injury or fatality in 1997. The percentage of late-night crashes with injury or fatality declined by 22%, from 22.3% of crashes to 17.4% of crashes in nonmetropolitan regions from 1990 to 1997. In Tennessee, the decline from 19.8% to 16% of crashes amounted to a 19% decline. The prevalence of these crashes declined by 17% (from 17.6% to 14.6% of crashes) in metropolitan regions over the same time period.

! Single vehicle crash prevalence has remained at about 25%-26% of total crashes in Tennessee. However, the prevalence of single vehicle crashes was higher in nonmetropolitan regions at 34% of crashes, compared with 19% in metropolitan areas. The lowest single vehicle crash rates in 1997 were in Knox, Claiborne, Davidson and Shelby Counties, while in 1997 the highest were in Perry, Houston and Van Buren Counties, at 81.3%, 69.3% and 69.2%, respectively.

! Injury or fatal crashes involving single vehicles have declined as a percentage of all crashes in Tennessee from 1990 to 1997, from 33% to 31%. The prevalence has declined from 42.6% in 1990 to 41.5% in 1997 in nonmetropolitan regions and from 24.6% to 21% over the same eight-year period in metropolitan regions.

! Because the role of alcohol in crashes is under-reported on police forms, an indirect or proxy indicator of alcohol-related crashes is used, i.e., the prevalence of late-night, single vehicle crashes involving young male drivers, ages 15-34. These types of crashes have declined in Tennessee from 4.5% to 3.3% of crashes in 1990-1997, a decrease of 27%. Over the same period, late-night, single vehicle crashes involving young male drivers have declined 27% in nonmetropolitan areas (6.4% to 4.7%) and 29% in metropolitan areas (2.8% to 2%). Such crashes occurred at more than twice the rate in nonmetropolitan as metropolitan regions.

! In 1997, counties with the highest proportion of such crashes were Houston (13.6%), Decatur (11.9%) and Moore (10.5%), while Shelby and Claiborne Counties had the lowest prevalence of such crashes (1.5% and 1.4%, respectively). Pickett County reported no such crashes in 1997.

! Alcohol-related crashes have declined by 33% in Tennessee, from 8.2% of total crashes in 1990 to 5.5% of 1997 crashes. This substantial decline was steepest in metropolitan regions (39%), from a base of 7% in 1990 to 4.3% in 1997. In nonmetropolitan counties, the decline was 29%, from 9.6% of crashes in 1990 to 6.8% in 1997.

- Counties in 1997 with the highest prevalence of alcohol-related crashes were Lake (40%), Bledsoe (21.1%) and Pickett (20%), with the lowest prevalence of alcohol-related crashes reported in Davidson and Williamson Counties (4.4% each), Hamilton County (3.7%) and Shelby County (3.6%).

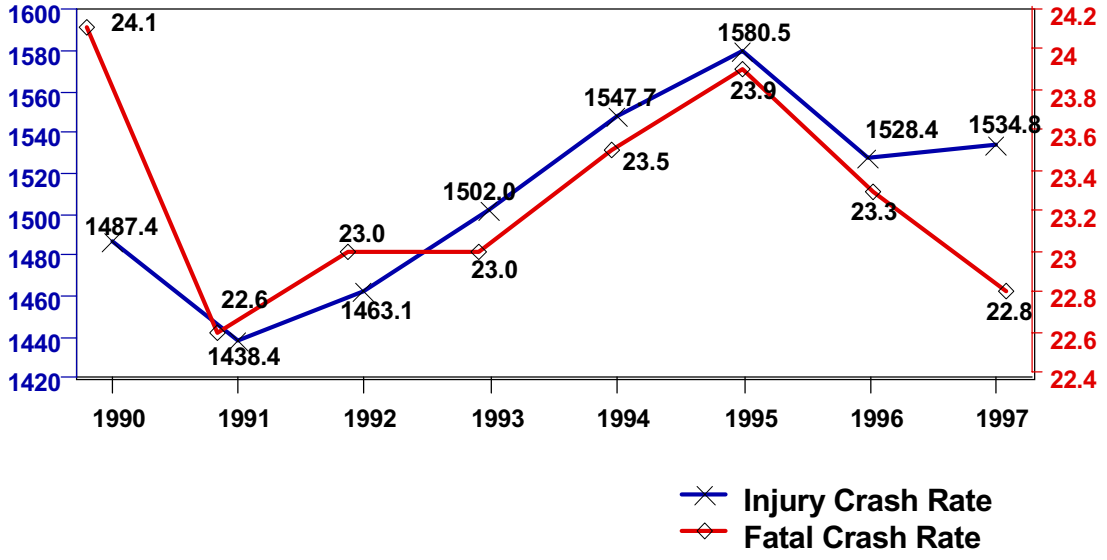
! For injury prevention, reducing alcohol-related crashes promises to have the greatest impact.

  - Fully 60% of crashes in which alcohol was involved, based on a positive BAC or a police report of alcohol, resulted in injury or death -- more in nonmetropolitan regions (62%) than in metropolitan regions (58%).

  - By contrast, reducing late-night driving crashes, single vehicle crashes or those to young male drivers would appear to have less impact on injury and fatality rates. Only about 1 in 3 (35%) late night crashes statewide in 1997 involved injury or fatality; 39% of single vehicle crashes involved injury or fatality, as did 32% of crashes with young male drivers (between 15 and 34 years of age). However, 41% of crashes statewide that occurred late at night to young male drivers in single vehicles resulted in either injury or death, suggesting that the combination of risk factors is more dangerous than any one separately.

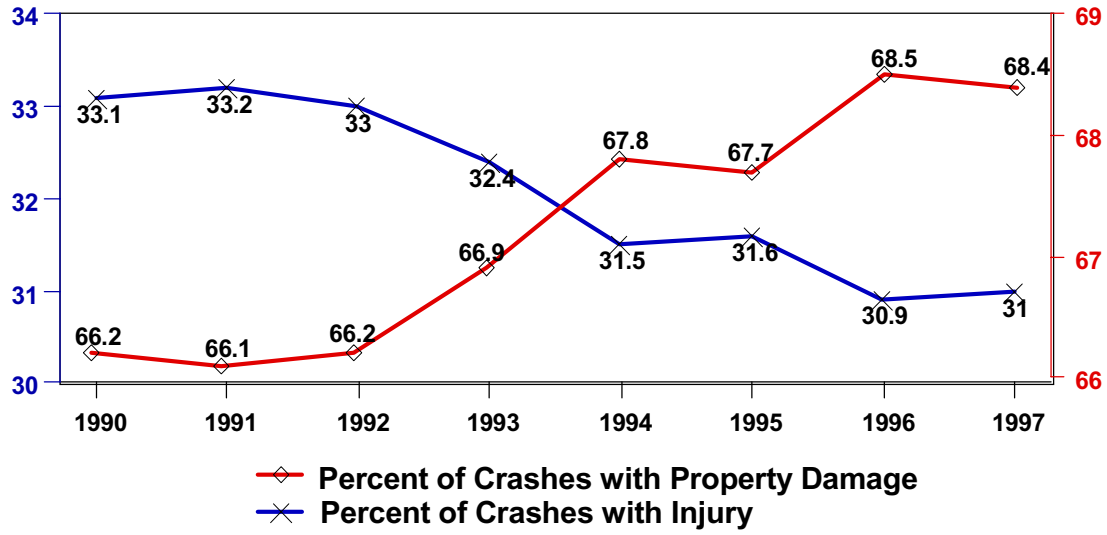
Source: Tennessee Department of Safety and CRASH data on HIT/SPOT Web site (**server.to/hit**).

Trends in Injury Crash Rates (per 100,000 Population) and Fatal Crash Rates (per 100,000 Population) Tennessee, 1990-1997



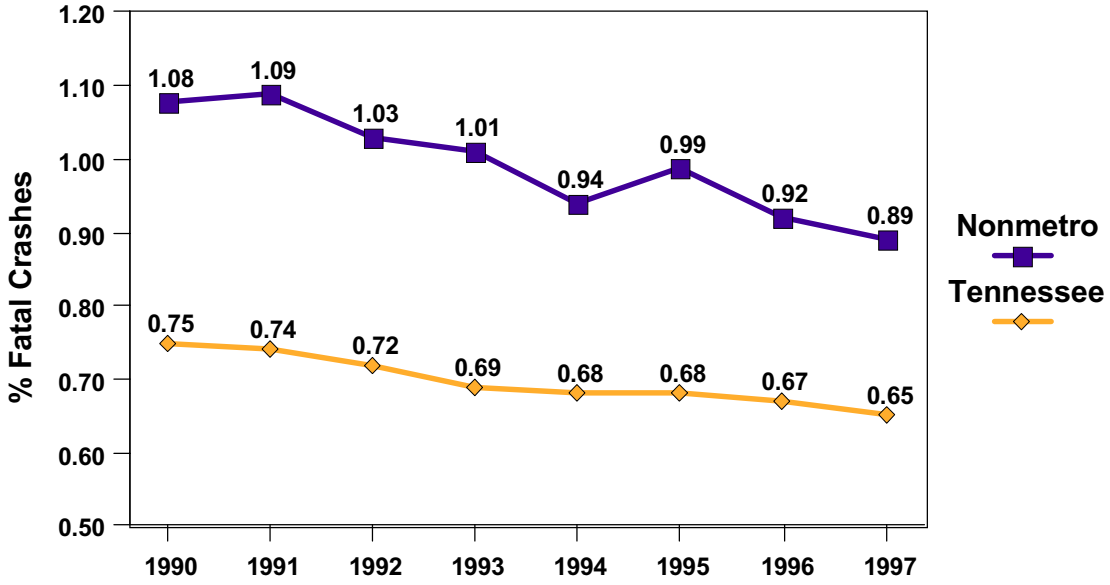
Source: Tennessee Department of Safety and HIT/SPOT Web site (server.to/hit)

Trends in the Percent of Crashes with Injury and the Percent of Crashes with Property Damage Tennessee, 1990-1997



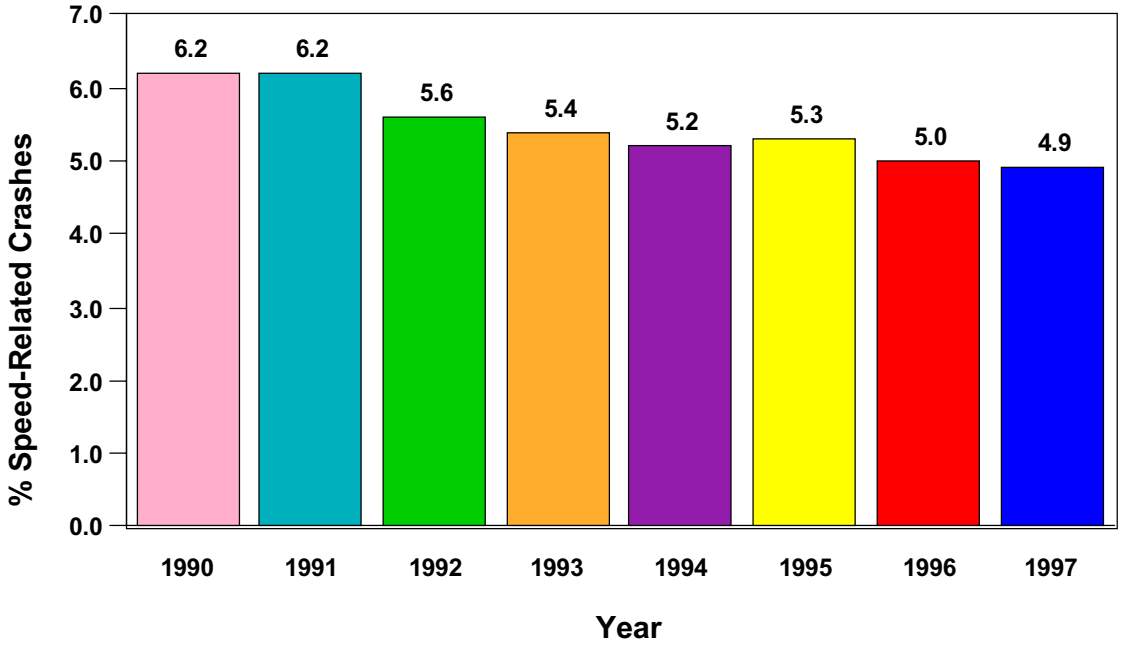
Source: Tennessee Department of Safety and HIT/SPOT Web site (server.to/hit)

Trends in the Percent of Crashes Resulting in Fatalities in Nonmetropolitan Regions and Tennessee, 1990-1997



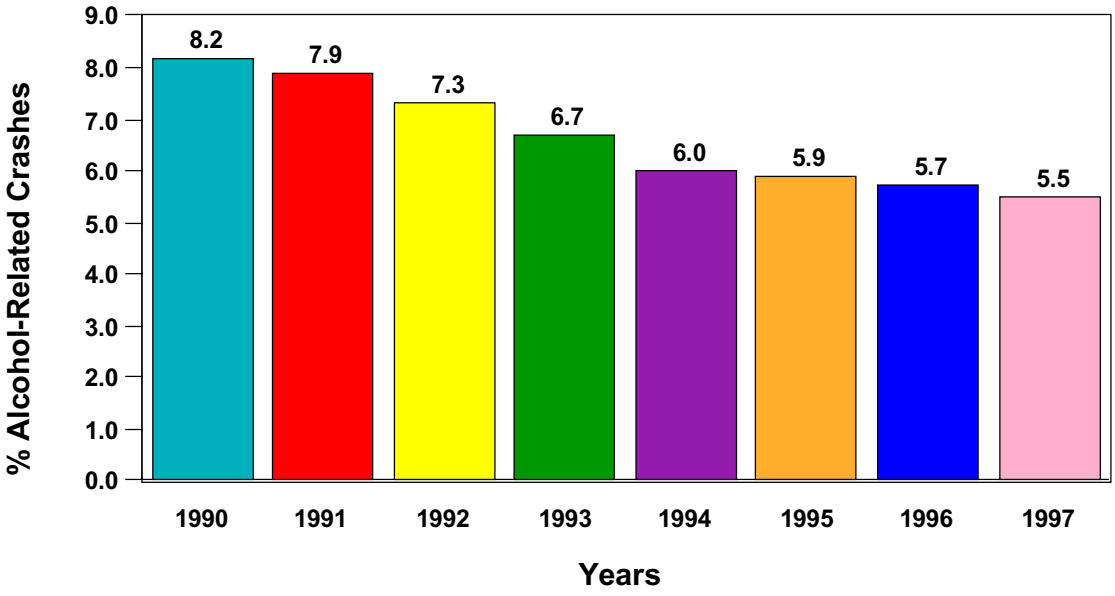
Source: Tennessee Department of Safety and HIT/SPOT Web site (server.to/hit)

Percent of Highway Crashes Where Speed was a Factor, Tennessee, 1990-1997



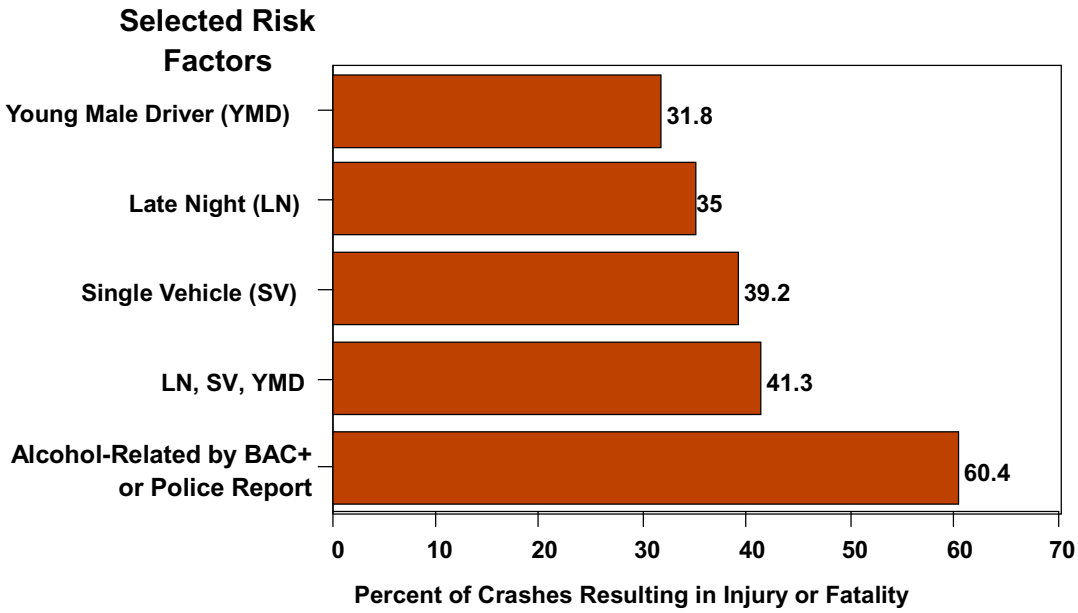
Source: Tennessee Department of Safety and HIT/SPOT Web site (server.to/hit)

Percent of Highway Crashes that are Alcohol-Related Based on BAC+ or Police Reports Tennessee, 1990-97



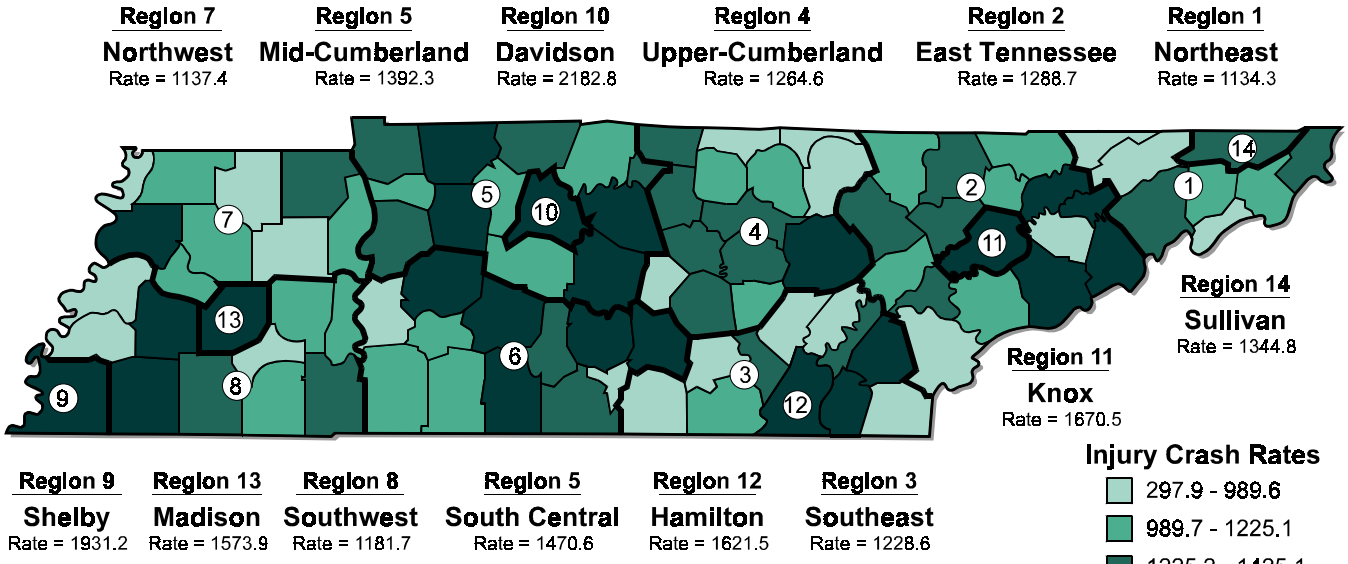
Note: BAC+: Positive Blood-Alcohol Concentration
Source: Tennessee Department of Safety and HIT/SPOT Web site (server.to/hit)

Percent of Tennessee Motor Vehicular Crashes that Resulted in Injury or Death, by Selected Risk Factors, Tennessee, 1997



Source: Tennessee Department of Safety and HIT Web site (server.to/hit)

INJURY CRASH RATES
(MOTOR VEHICLE CRASHES RESULTING IN INJURY PER 100,000 POPULATION)
BY COUNTY AND REGION, TENNESSEE, 1997



Source: Tennessee Department of Safety and HIT Web site (server.to/hlt)

INJURY PROFILE, TENNESSEE, 1995 - 1997

- With respect to overall leading causes of death for Tennesseans, unintentional injury is ranked fourth; suicide, eighth; homicide, ninth.

- Between 1995 and 1997, the number of injury deaths in Tennessee averaged 3,808 per year. The total number of injury deaths over the 1995 to 1997 period was 11,425. Of the total injury deaths in Tennessee, 7,647 (67%) were unintentional, and 3,778 (33%) were intentional.

- Unintentional injuries were the leading cause of death for Tennesseans ages 1 to 34. These were the third leading cause for ages 35 to 54, the fifth leading cause for ages 55 to 64, the sixth leading cause for infants (less that one year old), and the seventh leading cause for seniors (ages 65 and over).

- Motor vehicle deaths accounted for the highest proportion of unintentional injury deaths, with motor vehicle crashes causing 49% of these deaths in Tennessee from 1995 to 1997. Falls (9.3%) were the second leading cause, and poisonings (6.7%) were the third. The remaining causes of unintentional injury death were fires and burns (5%), suffocation (4.6%), and other causes (25%).

- Tennessee's unintentional motor vehicle crash death rates (23.42 per 100,000 population), unintentional suffocation death rates (2.3 per 100,000 population), unintentional fire or burn-related death rates (2.46 per 100,000 population), homicide rates (10.24 per 100,000 population), and firearm-related death rates (18.3 per 100,000 population)[15] emerge as among the highest cause-specific injury death rates in the Nation, when comparing Tennessee with the other U.S. states.

- Tennessee is among the U.S. states with the second highest injury death rates for unintentional falls (4.72 per 100,000), unintentional poisonings (3.16 per 100,000), unintentional drownings (1.94 per 100,000), suicides (13.4 per 100,000), and traumatic brain injuries (24.11 per 100,000).

- Homicide was the second leading cause of death for Tennesseans ages 15 to 34 in 1995 and 1997. It was also the fourth leading cause for ages 1 to 14, the sixth leading cause for ages 35 to 44, and the tenth leading cause of death for ages 45 to 54.

- Suicide was the third leading cause of death for ages 10 to 24, the fourth leading cause of death for ages 25 to 34, the fifth and the sixth leading cause of death for ages 35 to 44, and 45 to 54, respectively. Suicide was the ninth leading cause of death for ages 55 to 64.

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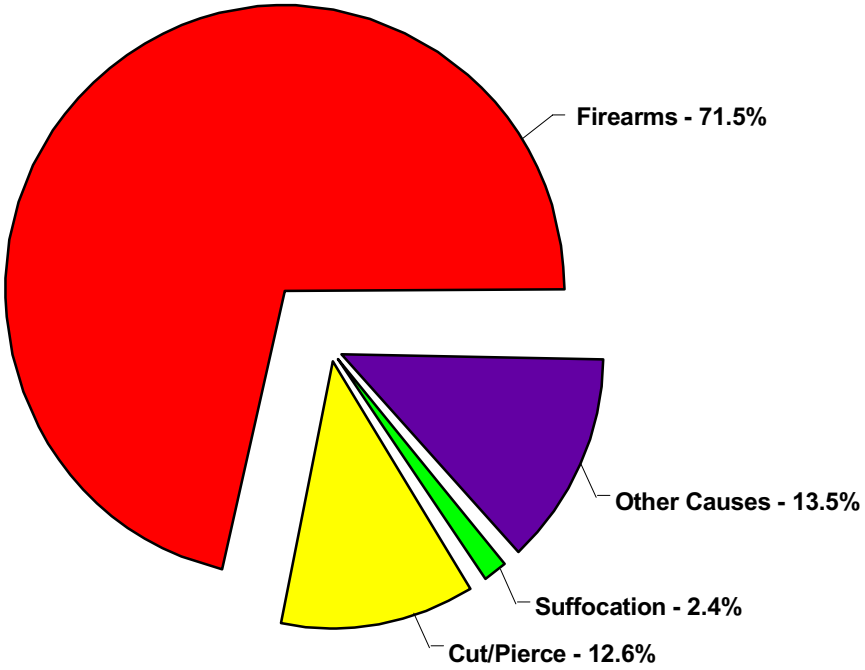
[15]This measure includes unintentional, intentional, and undetermined firearm deaths.

- Of all suicide deaths in Tennessee from 1995 to 1997, firearms accounted for 71%; poisonings, 13%; suffocation, 10%; and other causes, 5.5%.

- Seventy-one-and-one-half percent of Tennesseans who were killed by way of homicide or legal intervention were killed by a firearm; 13% were killed by a cutting or a piercing weapon; and 2.4% were suffocated. Thirteen-and-a-half percent of these deaths were by other means.

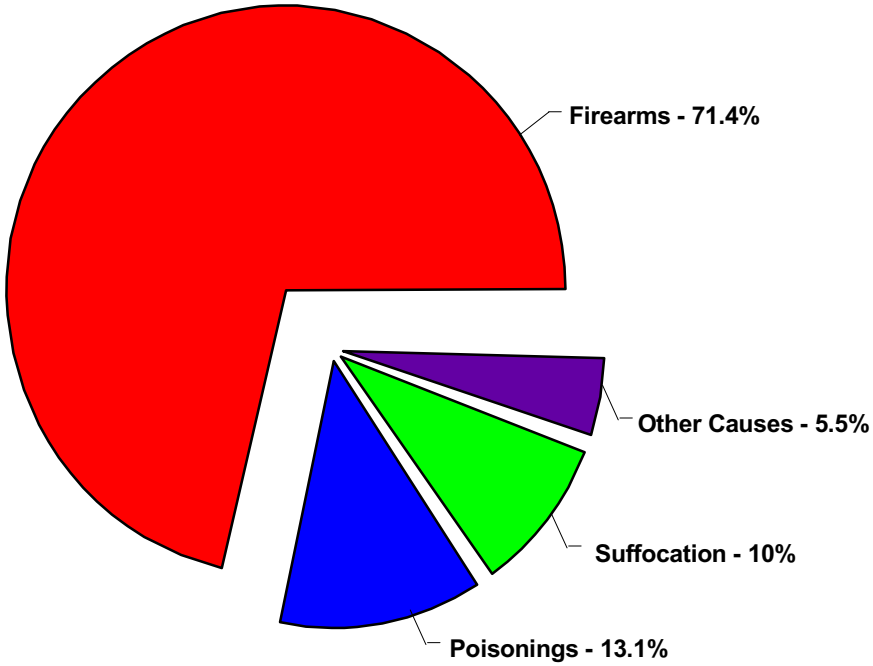
Source: Fact Book and Injury Profile for Tennessee. National Center for Injury Prevention and Disease Control, Centers for Disease Control and Prevention, 2000.

Percent of Homicides and Legal Intervention Deaths by Cause, Tennessee, 1995-97



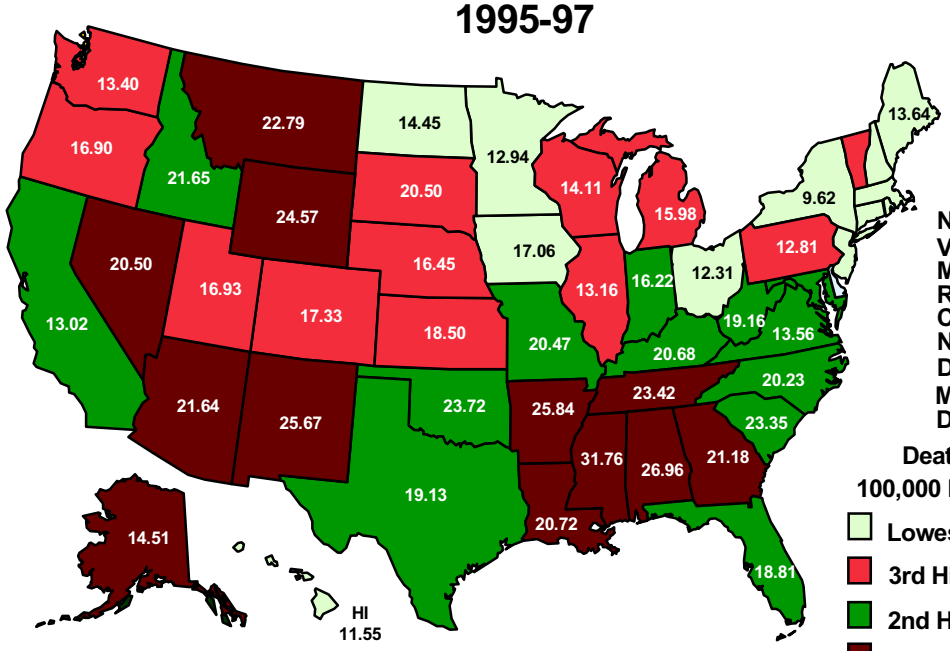
Source: Fact Book & Injury Profile for Tennessee, National Center for Injury Prevention and Disease Control, Centers for Disease Control and Prevention, 2000

Percent of Suicides by Cause, Tennessee, 1995-97



Source: Fact Book & Injury Profile for Tennessee, National Center for Injury Prevention and Disease Control, Centers for Disease Control & Prevention, 2000

Firearm-Related Death Rates*
1995-97



NH - 7.93
VT - 9.76
MA - 3.95
RI - 5.10
CT - 7.07
NJ - 5.34
DE - 8.86
MD - 14.69
DC - 48.59

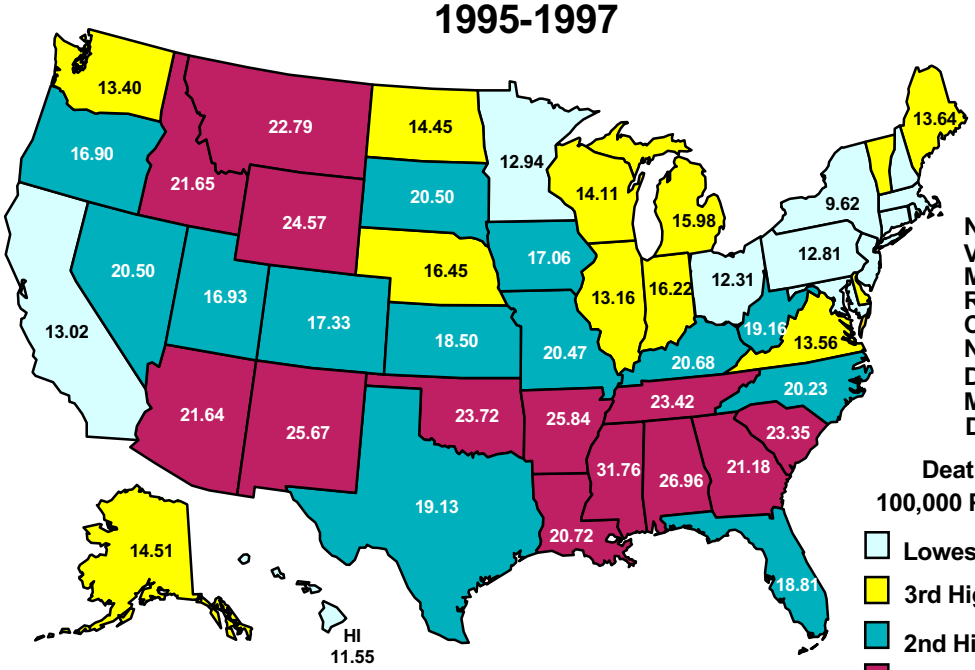
Deaths per
100,000 Population

- Lowest Rates
- 3rd Highest Rates
- 2nd Highest Rates
- Highest Rates

Tennessee - 23.42; United States - 13.84

*Includes deaths from firearm suicide, firearm homicide, unintentional firearm-related deaths, and firearm-related deaths of undetermined intent.
Source: Fact Book and State Injury Profile for Tennessee, Year 2000, CDC, 2000.

Unintentional Motor Vehicle, Traffic-Related Death Rates, 1995-1997



NH - 11.19
VT - 13.90
MA - 7.71
RI - 8.46
CT - 10.49
NJ - 10.33
DE - 16.88
MD - 13.08
DC - 10.73

Deaths per
100,000 Population

- Lowest Rates
- 3rd Highest Rates
- 2nd Highest Rates
- Highest Rates

Tennessee - 23.42; United States - 17.25

Source: Fact Book & State Injury Profile for Tennessee, Year 2000, CDC, 2000

ADOLESCENT PREGNANCY RATES, BIRTH RATES AND ADVERSE CONDITIONS, TENNESSEE, 1990-1998

Pregnancy Rates

! In 1998 in Tennessee, the pregnancy rate for early adolescents aged 10-14 was 2.0 per 1,000 females ages 10-14. Among teenagers 15-17 years old, the pregnancy rate was 48.2 per 1,000 females. Since 1996, Tennessee has met its own Year 2000 Objectives for reducing adolescent pregnancy rates. These Tennessee rate objectives are 2.5 per 1,000 for ages 10-14 and 55 per 1,000 for ages 15-17. Tennessee now exceeds by 4% the National Healthy People 2000 Objective for reducing the pregnancy rate per 1,000 adolescent females ages 15-17. The Healthy People 2000 rate is 50 per 1,000 females in this age group, as compared with Tennessee's rate of 48.2 per 1,000 in 1998.[16]

! Tennessee's adolescent pregnancy rate in 1998 for females aged 10-17 was 19.2 per 1,000. A total of 5,659 adolescent females were pregnant in 1998 in the State.

! Overall, Tennessee's adolescent pregnancy rate (per 1,000 females aged 10-17 years old) has declined by 24%, from 25.4 per 1,000 in 1990 to 19.2 per 1,000 in 1998.

! Although pregnancy rates for both white and black adolescents aged 10-17 declined by approximately 25% between 1990 and 1998, black adolescent females had a pregnancy rate 2.6 times higher than white adolescent females in 1998. The pregnancy rate of white females was 14.4 per 1,000 in 1998, while the rate for black females was 37.7 per 1,000. In 1997, the corresponding rates were 14.9 for whites and 40.4 for blacks. In 1996, these rates were 15.6 and 42.2, respectively.

! Counties in Tennessee with the highest pregnancy rates for females aged 10-17 in 1998 were Lauderdale County (33.4) and Hardeman County (29.6). Counties with the lowest pregnancy rates among females aged 10-17 were Moore County (3.3) and Clay County (5.4).

Birth Rates and Adverse Conditions for Live Births

! Adolescent birth rates in Tennessee have been declining steadily since 1990. The birth rate among adolescent females aged 10-17 in 1990 was 17.7 per 1,000 adolescent females, whereas in 1998, it was 15.0 per 1,000, a decline of 15%.

[16]Healthy People 2000 uses the age-group 17 and under.

- The 1998 adolescent birth rate for black females aged 10-17 was 29.1 per 1,000 females, a decline of 19% since 1990. Among white females aged 10-17, the adolescent birth rate was 11.4 per 1,000 in 1998, a decline of 12% since 1990.

- Of all births in Tennessee in 1998, 1.5% were births to white adolescent females, while 3.7% were to black adolescent females. This is down from 1997 when the percentages were 1.9% for whites and 4.2% for blacks.

- In 1998, 2.4% of adolescent females who gave birth in that year received no prenatal care during their pregnancies. In 1997 and 1996, the percentages were 2.9% and 2.5%, respectively. Among white adolescent mothers, 1.5% received no prenatal care, compared to 3.7% of black adolescent mothers.

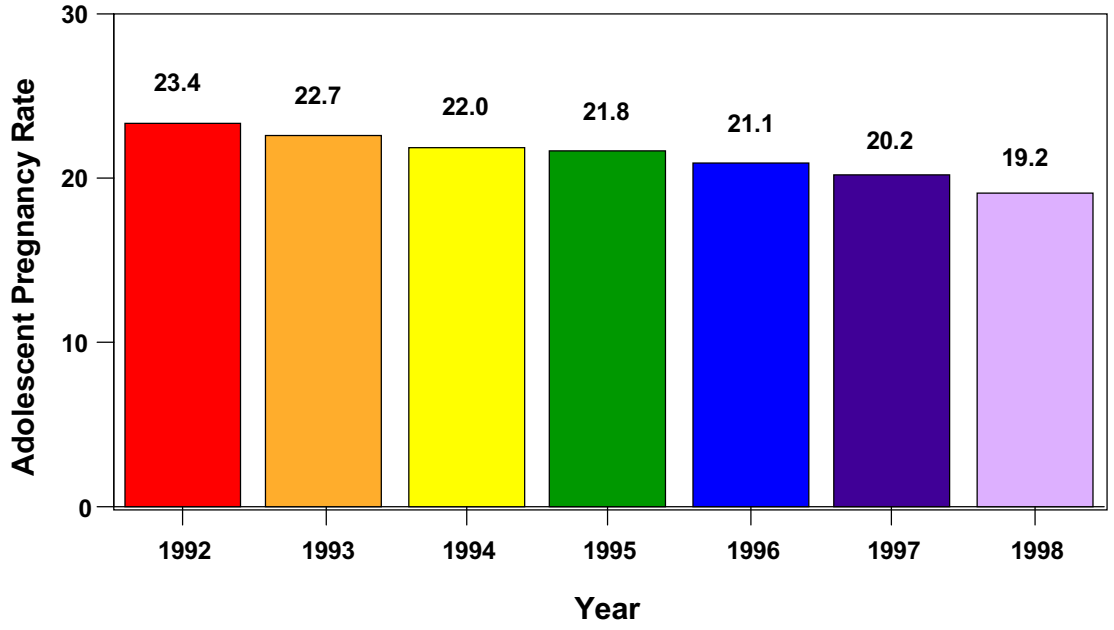
- Overall, 9.4% of adolescent females who had live births in 1998 received inadequate prenatal care during their pregnancies (12.8% of blacks and 6.9% of whites). While 1998 figures did not change from 1997, the prevalence of inadequate prenatal care among adolescent females giving birth has declined since 1990, when 13.2% of adolescent females who had live births received inadequate prenatal care (18.9% of blacks, 9.1% of whites). The rate of decrease between 1990 and 1998 was 29% overall: 32% among blacks and 24% among whites.

- Twelve percent of adolescent females giving birth in 1998 received either inadequate or no prenatal care (down from 16% in 1990). In 1998, 17% of black adolescents received inadequate or no prenatal care, and 8% of white adolescents received inadequate or no prenatal care. Since 1990, a 30% decline in the prevalence of this risk factor for adverse birth outcomes is observed for blacks and a 21% decline for whites.

- The percent of adolescent births occurring to unmarried females in Tennessee ages 10-17 remained stable between 1997 (85.9%) and 1998 (86%). There has been an 18% increase in births to unmarried adolescents since 1990 when 73.1% of adolescent females giving birth were unmarried. Almost all births to black adolescents in 1998 were to unmarried females (99.3%) with little change since 1990 (98.4%). By contrast, births to unmarried white adolescents ages 10-17 have dramatically increased by 41%, from 54.7% in 1990 to 77.3% in 1998.

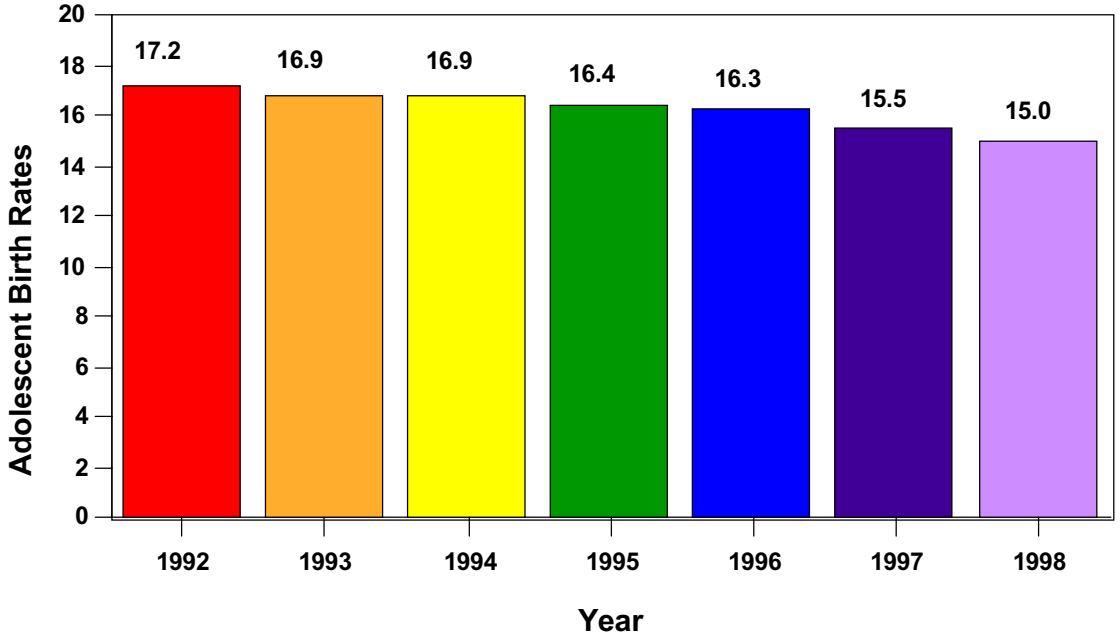
Source: ***Tennessee Adolescent Pregnancy Summary Data***, Health Statistics and Information, TDH, January 1999.

Adolescent Pregnancy Rate (Per 1,000 Females Ages 15-17) Tennessee, 1992-1998



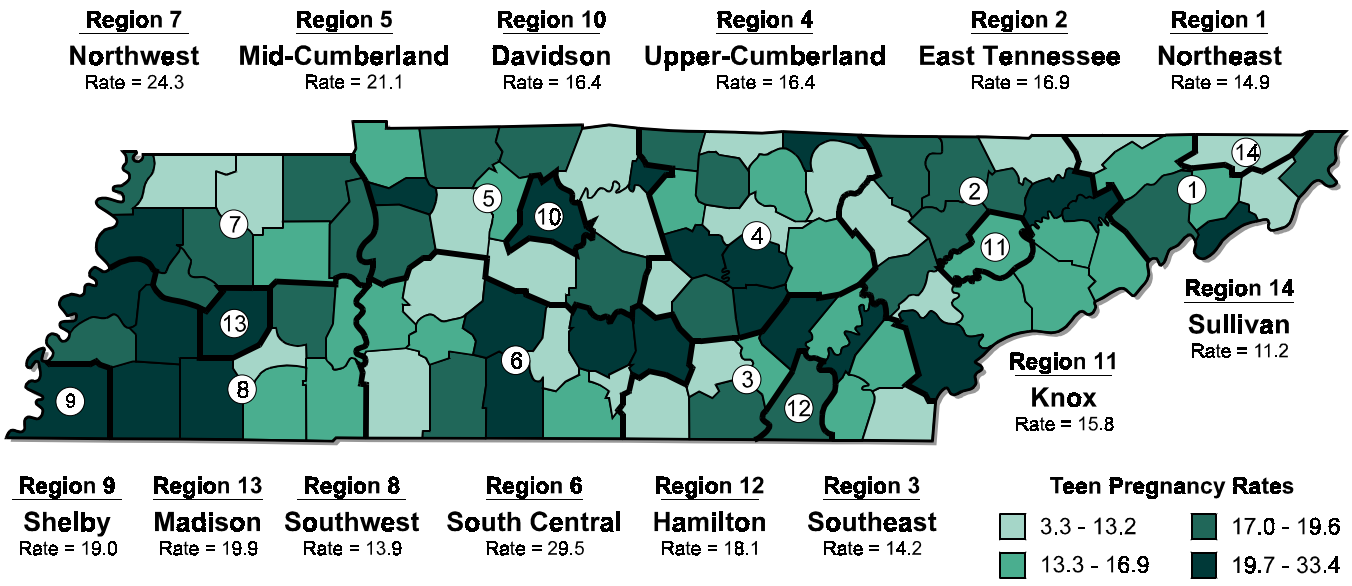
Source: Tennessee Adolescent Pregnancy Summary Data, Health Statistics and Information, TDH, January 1999.

Adolescent Birth Rates (per 1,000 Females Ages 10-17) Tennessee, 1992-1998



Source: Tennessee Adolescent Pregnancy Summary Data, Health Statistics and Information, TDH, January 1999.

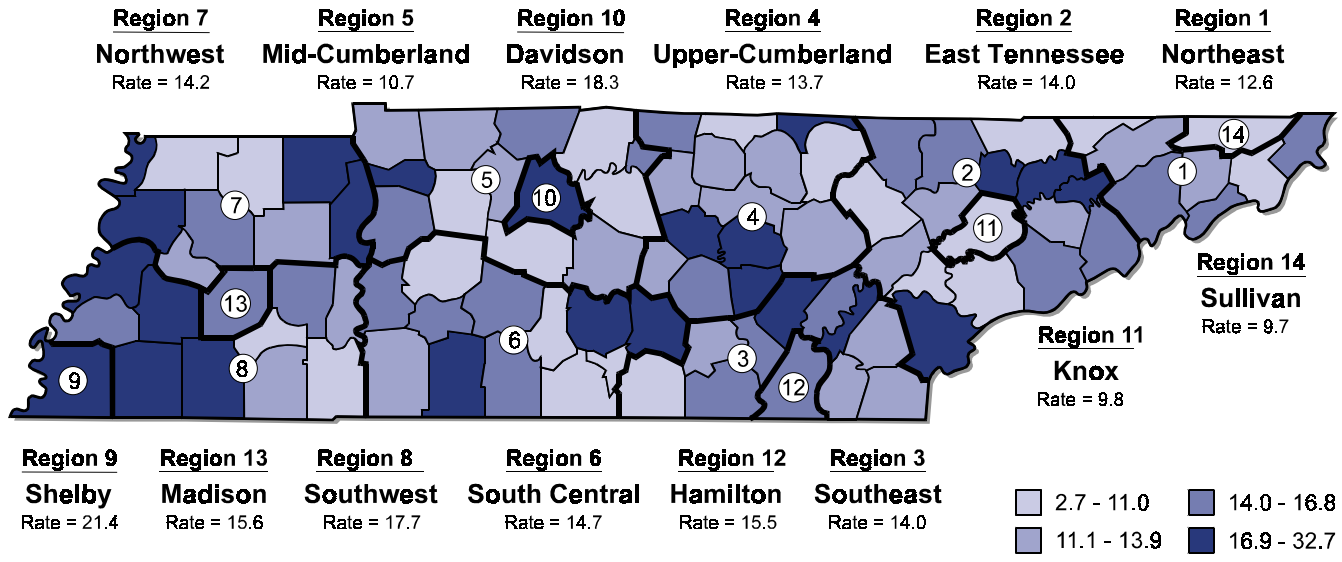
ADOLESCENT PREGNANCY RATES (PER 1,000 FEMALES AGES 10-17) BY COUNTY AND REGION, TENNESSEE, 1998



Source: Tennessee Adolescent Pregnancy Summary Data, Health Statistics and Information, TDH, January 1999.

Statewide Rate = 19.2

ADOLESCENT BIRTH RATES (BIRTHS PER 1,000 FEMALES AGES 10-17) BY COUNTY AND REGION, TENNESSEE, 1998



Source: Birth Certificate Data, Tennessee Department of Health, and HIT Web site (server.to/hit)

Statewide Rate = 15.0

TENNCARE ENROLLMENT, AS OF MAY 2000

! Statewide, 1,316,216 persons were enrolled in TennCare as of May 2000. The TennCare enrollment rate for Tennessee, defined as the percent of the population[17] enrolled in TennCare, was 24.2%.

! Of those individuals enrolled in TennCare, 419,170 (31.8%) were 13 years of age and under. This represents 39% of all persons 13 and under in Tennessee.

! The TDH Regions with the highest TennCare enrollment rates were Upper Cumberland (30%) and Southwest Tennessee (including Madison County) - 29%. Mid-Cumberland Region and Knox County had the lowest TennCare enrollment rates (16% and 19%, respectively).

! The counties with the highest TennCare enrollment rates were Fentress County, at 49%, and Hancock, Grundy and Scott Counties, each at 48%. The counties with the lowest enrollment rates were Williamson County - 7%; Rutherford County - 14%; and Wilson County - 15%.

! TennCare eligibles are classified into eight main categories: infants (under one year of age), children ages 1 to 13, males ages 14 to 44, females ages 14 to 44, adults ages 45 to 64, adults ages 65 and over, dual eligibles enrolled in both Medicaid and Medicare, and the blind and disabled. The percentage of persons enrolled in TennCare as of May 2000 by these established categories were:

-	Under one year of age	2.6%
-	Ages 1 to 13	29%
-	Ages 14 to 44 (Males)	10%
-	Ages 14 to 44 (Females)	21%
-	Ages 45 to 64	8%
-	Ages 65 and Over	1.5%
-	Medicaid/Medicare Duals	13%
-	Aid to the Blind and Disabled	14%

! Reflecting eligibility criteria, 53% of TennCare enrollees were females of childbearing age and children under 14. Medicaid/Medicare Dual Eligibles and Blind and Disabled comprised 27% combined.

! Among TennCare enrollees as of May 2000, 60.5% were Medicaid eligibles, while 39.5% were uninsured/uninsurables.

[17]Population is based on the TDH estimates for population in 1998.

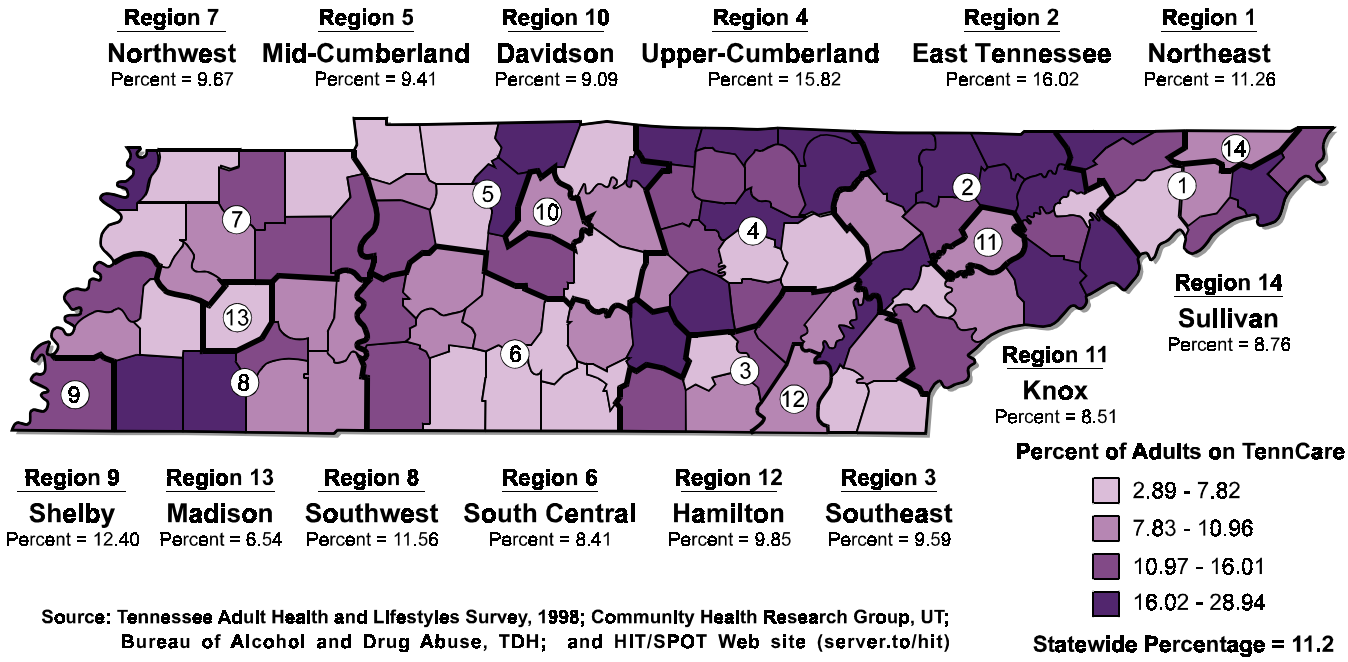
! Of the 795,968 Medicaid eligibles enrolled in TennCare as of May, 2000, 31% were ages 1 to 13; 20% were Medicaid/Medicare duals; 19% were females ages 14 to 44; and 19% were blind/disabled. Approximately 5.5% of Medicaid eligibles were males between 14 and 44 years of age; 3.7% were less than one year of age; and 1% were ages 45 to 64. The category with the lowest percentage of Medicaid eligibles consisted of individuals ages 65 and over (0.8%), who are mainly covered by Medicare.

! Of the 520,248 uninsured/uninsurable enrollees in the TennCare program, over half were either children aged 1-13 (26%) or females aged 14-44 (25%). About 36% of uninsured/uninsurables were adults ages 45 to 64 and males ages 14 to 44 (18% each). Seven percent were classified as blind/disabled; 3.3% were dually eligible for Medicaid/Medicare; and 2.5% of this group were aged 65 and over. Infants represented the lowest percentage of uninsured/uninsurable enrollees (1.0%).

! As of May, 2000, the Managed Care Organizations (MCOs) with the largest percentages of TennCare enrollees were BlueCare (37%), Access Med Plus (25%) and Xantus (10%). The remaining MCOs had less than a 10% share of TennCare enrollees in their organization.

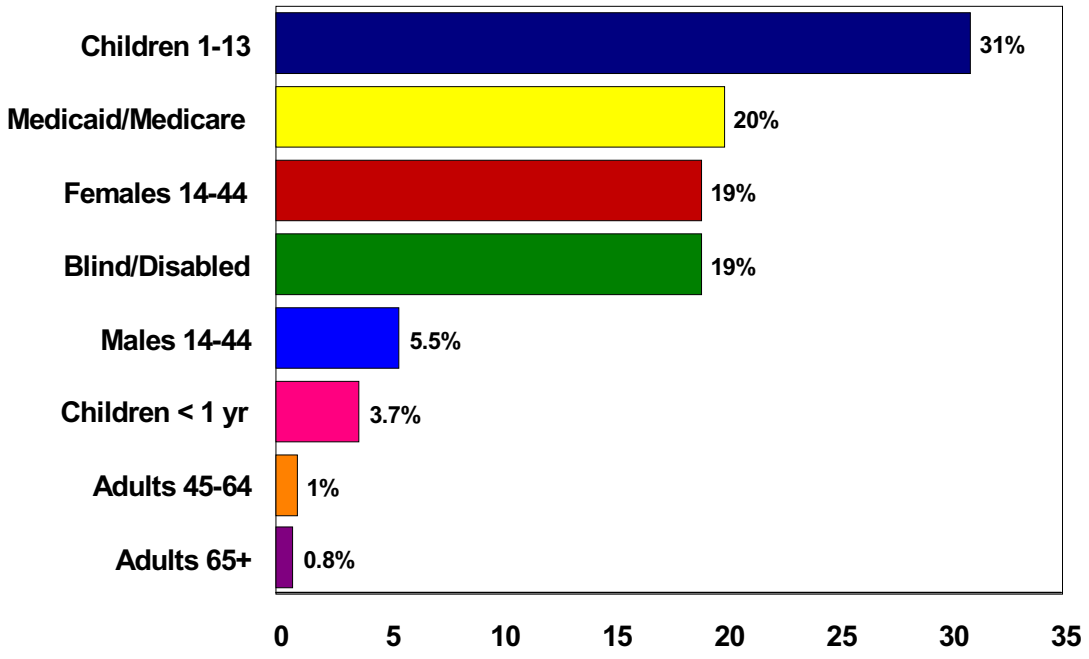
Source: Bureau of TennCare, Tennessee Department of Health, May 2000.

PERCENT OF ADULTS REPORTING TENNCARE COVERAGE BY COUNTY AND REGION, TENNESSEE, 1998



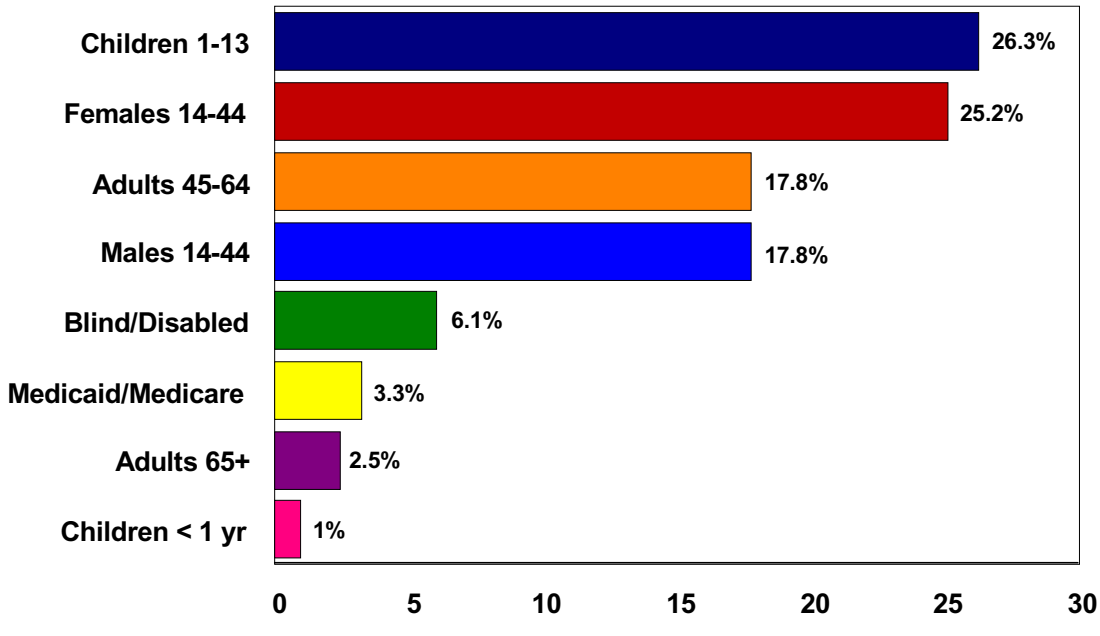
Source: Tennessee Adult Health and Lifestyles Survey, 1998; Community Health Research Group, UT; Bureau of Alcohol and Drug Abuse, TDH; and HIT/SPOT Web site (server.to/hit)

Percentage Share of TennCare Eligibles among Medicaid Enrollees, Tennessee, as of May 2000



Source: Bureau of TennCare, TDH, May 2000

Percentage Share of TennCare Eligibles among Uninsured/Uninsurable Enrollees, Tennessee, as of May 2000



Source: Bureau of TennCare, TDH, May 2000.

HEALTH FACILITIES, TENNESSEE, 1998

Hospitals

Resources-Facilities

! Of the 130 hospitals[18] completing the Joint Annual Report of Hospitals conducted by the Tennessee Department of Health in 1998, 123 or 95% were general medical and surgical hospitals, while six were specialty hospitals, including three pediatric, one obstetrics and gynecology, one eye, ear, nose and throat, and one other specialty treatment hospital. One hospital did not complete this section.

! While the number of hospitals declined between 1990 and 1998 by about 6%, the number of licensed and staffed hospital beds declined by 12% and 19%, respectively. In 1990, there were 26,751 licensed beds and 22,418 staffed beds, while in 1998, there were 23,548 licensed beds and 18,135 staffed beds. Seventy-seven percent of these licensed beds were being staffed in 1998, compared to 76% in 1997.

! The number of staffed beds per 1,000 population in 1998 was 3.3. In 1997, 1996, and 1995, there were 3.5, 3.6, and 3.7 staffed beds per 1,000 population, respectively. The decline in the number of staffed beds per 1,000 population from 1995 to 1998 is 11%.

! Of the hospitals that completed the following questions in the survey in 1998:

- 127 (98%) had Ultrasound capabilities; 125 (97%) hospitals had CT/CAT scans; and 91 (71%) had MRIs
- 121 (96%) hospitals had 24-hour staffed emergency departments
- 98 (76%) hospitals provided obstetric services
- 75 (58%) hospitals provided pediatric services
- 46 (35%) hospitals provided hospital-based ambulance services.

Utilization - Inpatient Care

! Inpatient days in Tennessee hospitals in 1998 totaled 3.755 million, down from 5.080 million days in 1990. Admissions declined from 788,209 to 731,622 over the same period. From 1990 to 1998, inpatient days declined by 26%, while admissions declined by 7%

[18]Hospitals include only short-term, non-Federal, general/specialty acute care hospitals.

! Overall, the average length of stay in Tennessee hospitals has declined by 20% since 1990, from 6.4 days in 1990 to 5.1 days in 1998. The average daily census has declined steadily from 13,810 persons per day in 1990 to 10,287 in 1998. This decline amounted to 26% over the period.

! The counties with the longest average length of stay were Benton, Perry, and Shelby Counties. The average length of stay was 8.5 days in Benton County and 5.9 days in both Perry and Shelby Counties. Shelby and Davidson Counties had the highest average daily census at 2,211 and 2,012 patients per day, respectively.

! Occupancy rates[19] for hospital beds did not fluctuate dramatically between 1997 and 1998 (43% to 44% for licensed beds and 57% to 58% for staffed beds). Since 1990, however, such rates have fallen steadily. In 1990, the hospital occupancy rate was 52% for licensed beds and 62% for staffed beds. Declines have amounted to 15% and 6%, respectively.

Utilization - Emergency Care

! The statewide emergency room visit rates in short-term, non-federal hospitals were about the same in 1998 (446 visits per 1,000) as in 1996 (441 visits per 1,000) and 1997 (438 visits per 1,000).

! For counties with hospitals and emergency rooms (ERS), ER visit rates ranged from a low of 159 visits per 1,000 population in Williamson County to a high of 798 visits per 1,000 in Sullivan County.

Costs

! While inpatient days, admissions, occupancy rates, average length of stay and average daily census have all steadily declined between 1990 to 1998, total operating costs for hospitals and costs per adjusted patient day have increased.

! From 1990 to 1998, total operating costs[20] for hospitals in Tennessee increased approximately 51%, from about $4.5 billion in 1990 to $6.8 billion in 1998. Between 1997 and 1998 alone, the total operating costs rose by almost $280 million. This represents a 4% increase.

! Total net hospital revenue also increased, from $4.8 billion to nearly $7 billion between 1990 and 1998, a 46% increase.

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[19] The occupancy rate is defined as the ratio of inpatient days to bed days open during the year expressed as a percentage.

[20] Dollar amounts have not been adjusted for inflation.

- Tennessee hospitals derive an increasing share of their income from outpatient services. In 1990, 21% of net patient revenue came from outpatient services, compared to 36% in 1998.

- The gross patient charges in Tennessee hospitals amounted to $12.75 billion in 1998. This is a 6.5% increase (over $780 million) in one year. The net patient revenue[21] was $6.53 billion.

- In 1998, the gross charges per adjusted inpatient day were $2,135. This is a 20% increase over 1995, when the gross charges per adjusted inpatient day were $1,777. The gross patient charges per adjusted inpatient day were highest in Robertson and Knox Counties, at $7,895 and $2,627, respectively.

- The net patient revenue per adjusted inpatient day was $1,091 in 1998, a 6% increase over 1995 ($1,024). In 1998, the net inpatient revenue per hospital admission was $5,321, while in 1995, it was $5,088 (a 5% difference).

Source: Joint Annual Report of Hospitals, TDH, Office of Health Statistics and Research, 1999, and under "HOSPITALS" on the HIT Web site (server.to/hit).

Nursing Homes

Resources - Facilities

- According to the Tennessee Department of Health's Joint Annual Report of Nursing Homes, the number of licensed nursing homes in Tennessee in 1998 was 362. This represents a 2% increase since 1997.

- Between 1997 and 1998, the number of nursing home beds, both licensed and staffed, increased by about 1%. The number of licensed beds was 39,193 in 1997 and 39,545 in 1998. There were 38,919 staffed beds in 1997, compared to 39,289 in 1998.

- There were 56 licensed beds per 1,000 population aged 65 years and older in 1998. Both the number of licensed beds per 1,000 population aged 65 and over and the number of staffed beds per 1,000 population aged 65 and over have remained stable between 1996 and 1998. In each of the three years, there were 56 beds (licensed and staffed) per 1,000 population aged 65 and over.

[21]Net patient revenue is equal to gross patient charges minus contractual adjustments.

Utilization

- The number of nursing home patients in 1998 was 36,012, compared to 35,736 in 1997.

- Approximately 5% of the population aged 65 and over in Tennessee were in nursing homes in 1998. This proportion has remained relatively stable since 1990.

- In 1998, 73% of the nursing home patients were female and 27% were male. Ninety-one percent of the patients were aged 65 and over, with roughly the same gender and age distributions as in the previous two years.

- Nursing home admissions numbered 60,158 in 1998, an increase of 3% from 1997 (58,380), and a 104% increase from 1990 (29,488). In the past nine years, discharges have increased by 120% from 27,400 in 1990 to 60,330 in 1998.

- Of the 60,330 nursing home discharges in 1998, 12,785 or 21% were deaths, the same percentage of deaths as in 1997.

- The average daily census[22] of nursing home patients in Tennessee in 1998 was 35,593, compared to 31,797 in 1990. This represents an increase of 12% over 1990 levels.

- Both licensed and staffed occupancy rates remained stable between 1996 and 1998. The occupancy rates in 1998 were 91% for licensed beds and 92% for staffed beds. These rates are somewhat lower than those in 1990, when the percent occupancy for both licensed and staffed beds was 94%.

- The average length of stay in nursing homes continued to decline in 1998 to 195 days compared to 246 days in 1996. This was a drop of nearly 21% over the three-year period.

Costs

- Total operating costs for all nursing home facilities in Tennessee continued to increase in 1998 to approximately $1.5 billion, compared to $1.39 billion in 1997, and $1.36 billion in 1996.

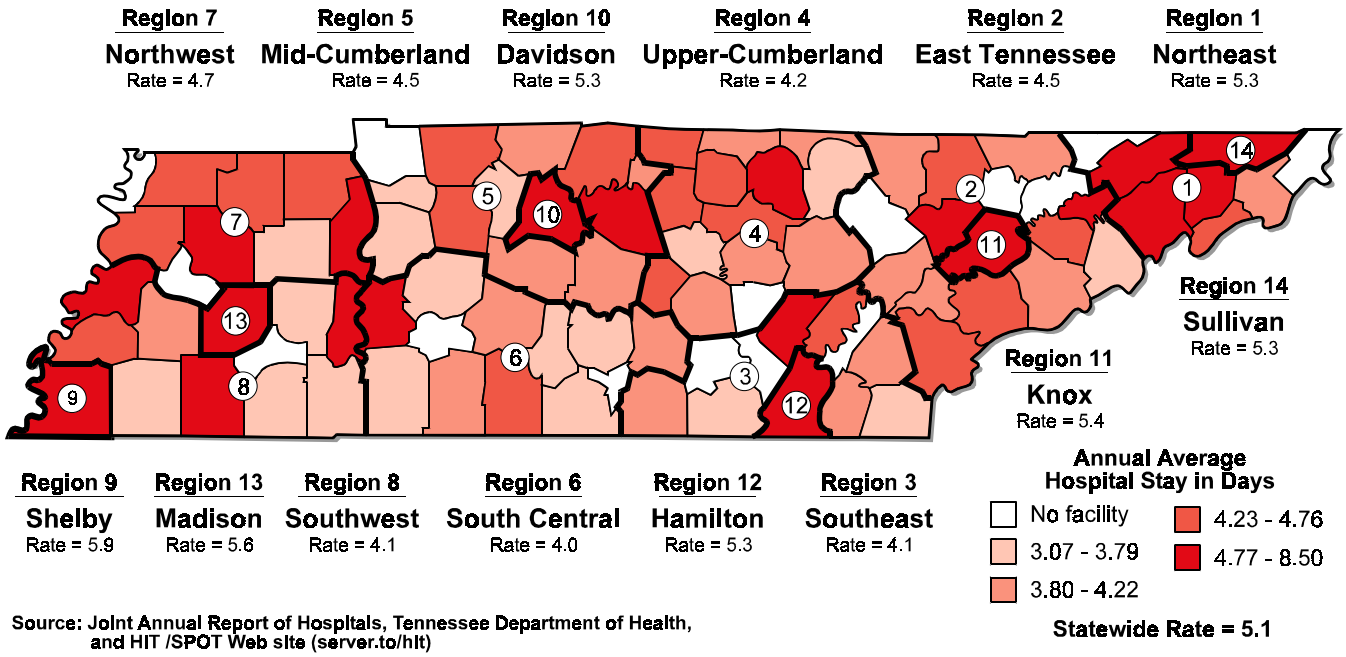
- Total revenue also increased between 1997 and 1998 from $1.43 billion to $1.54 billion. This represents an 8% increase in one year.

- Average gross charges per patient per day for the State were $143 in 1998, compared to $138 in 1997, a 4% increase.

Source: *Joint Annual Report of Nursing Homes,* TDH, Office of Health Statistics and Research, 1999, and under “NURSING HOMES” on the HIT Web site (**server.to/hit)**

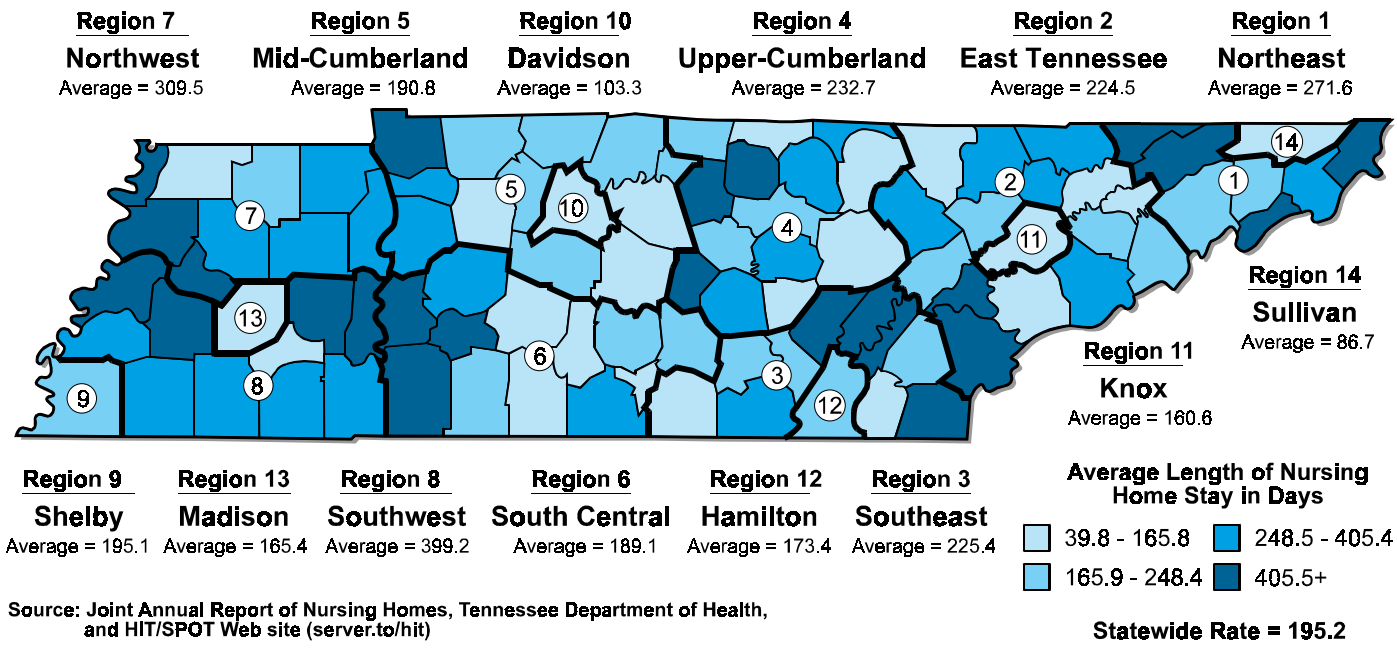
[22]Patient census data is reported as of December 31 of each year.

ANNUAL AVERAGE HOSPITAL STAY IN DAYS BY COUNTY AND REGION, TENNESSEE, 1998



Source: Joint Annual Report of Hospitals, Tennessee Department of Health, and HIT /SPOT Web site (server.to/hit)

AVERAGE LENGTH OF NURSING HOME STAY IN DAYS BY COUNTY AND REGION, TENNESSEE, 1998



Source: Joint Annual Report of Nursing Homes, Tennessee Department of Health, and HIT/SPOT Web site (server.to/hit)

HEALTH MANPOWER, TENNESSEE, 1999

FTE Primary Care Providers, 1999

! In 1999, 5,005 full-time equivalent[23] (FTE) primary care providers were in practice in Tennessee. Primary care providers include MDs and DOs with the following specialities: general practice, family practice, pediatrics, internal medicine, obstetrics or obstetrics/gynecology, and general preventive medicine (public health). Mid-level providers are also included. There are: nurse practitioners, certified nurse midwives, and physician assistants. A reported 4,758 FTE primary care physicians (MDs and DOs) were in practice in Tennessee in 1999. Sixty-five percent (3,264) of the total FTE primary care physicians were practicing in four metropolitan regions of the State: Davidson, Hamilton, Knox, and Shelby Counties. The remaining 35% of primary care physicians were practicing in nonmetropolitan counties.

! There were also 247 full-time equivalent mid-level primary care providers in Tennessee in 1999. The mid-level practitioner group is composed of nurse practitioners, nurse midwives, and physician assistants. Almost two-thirds of mid-level providers were practicing in nonmetropolitan counties.

! The most FTE primary care physicians were located in two metropolitan counties -- Shelby County (1,182) and Davidson County (1,085) in 1999. Among nonmetropolitan regions, Mid-Cumberland (364.7), Northeast (349.1), and East Tennessee (323.8) Regions had the most FTE primary care physicians.

Obstetrical Care

! In 1999, 522 FTE obstetrical (OB) care providers were actively practicing in Tennessee. Sixty percent (318) of these FTE obstetricians were practicing in the four metropolitan counties. Thirty-three mid-level FTE obstetrical care providers practiced in Tennessee in 1999. Of these mid-level practitioners, one in every two practiced in a metropolitan county.

! In 1996, 17 counties had no obstetrical (OB) providers, and in 1997, 13 counties had none. In 1999, 10 counties reported having no OB providers. According to the Tennessee Department of Health, this shortage was primarily due to the absence of a medical facility offering obstetrical/delivery services in those counties with low birth rates and access to adequate services in neighboring counties.

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[23]Full-time equivalency is a measure of a health care providers' time spent on diagnosing, treating, or advising health care consumers. If a physician spends 20 hours a week working directly with health care consumers, then this physician counts as 0.5 FTE; if a physician spends 40 or more hours per week working directly with health care consumers, then this physician counts as 1.0 FTE.

! Eight counties reported having 10 or more OB providers. Four of these 8 were metropolitan counties. The county with the largest proportion (19%) of OB providers in the State is Shelby (106 of the 554 total). Shelby County also accounts for 23% of the recorded births in Tennessee between 1996 and 1998.

Pediatric Providers

! In 1999, 1,089 pediatric primary care providers were reported in Tennessee. Of the pediatric care providers, 703 (67%) were practicing in the four metropolitan counties.

! In many counties, the numbers of pediatric practitioners do not correspond closely to the size of the population aged 0-17. Thirty-three percent of pediatric primary care physicians were located in nonmetropolitan areas, whereas 60% of the population aged 0-17 resided in the nonmetropolitan counties.

! Eighty full-time equivalent mid-level pediatric primary care providers (nurse practitioners and physician assistants) were practicing in Tennessee in 1999. Of these, 25% were practicing in the four metropolitan counties.

TennCare Primary Care Providers[24]

! As of December 1999, 1,659 FTE TennCare primary care physicians were actively practicing in the State. Of these, 72% (1,202) were reported as practicing in the four metropolitan counties. Although in December 1999 the population of the 91 nonmetropolitan counties accounted for 60% of the TennCare enrollees in the State, less than 33% of the TennCare primary care physicians were practicing in nonmetropolitan counties.

! There were 114 full-time equivalent mid-level TennCare primary care providers actively practicing in Tennessee as of December of 1999. Seventy percent of these providers were located in nonmetropolitan regions.

[24]These are MDs and DOs with primary care specialties who contract with one or more managed care organizations to serve the TennCare population. Their numbers also include mid-level providers - nurse practitioners, nurse midwives, and physician assistants.

Numbers of Primary Care Providers by Category and Provider-to-Population Ratios, Tennessee, 1999

Regions	1999 FTE Mid-Level Primary Care Providers	1999 FTE Primary Care Physicians	Provider-to-Population Ratio (1 : X)
Nonmetropolitan	159	1,582	1,927
Northwest	14.8	114.6	1,951
Southwest	20.5	137.7	2,098
Mid-Cumberland	42.9	321.8	2,149
South Central	20.8	144.7	2,025
Upper Cumberland	22.7	148.7	2,152
Southeast	14.4	130.8	1,947
East Tennessee	47.5	276.3	1,960
Northeast	28.9	320.2	1,330
Metropolitan	88	3,176	651
Davidson	30	1,055	508
Hamilton	16	409	716
Knox	23	549	657
Shelby	19	1,163	756
Statewide	247	4,758	1,095

Note: Sullivan and Madison Counties which are usually included as TDH Regions are not separated out here.
Source: Health Access Plan Update: Health Shortage Areas, Tennessee Department of Health, Bureau of Health Services, July 2000.

FTE Primary Care Provider-to-Population Ratios

! High FTE primary care physician-to-population ratios indicate potentially underserved areas. Provider shortage areas are designated by TDH to include counties or groups of counties that display the highest (i.e. “worst”) thirty ratios of providers to population. The statewide ratio was 1:1,152 in 1999. All counties with provider-to-population ratios higher than 1:2,463 were designated as primary care shortage areas.

- In 1999, the provider-to-population ratio was slightly more than 3 times higher (i.e., less favorable) in nonmetropolitan compared to metropolitan counties, at 1:2,121 and 1:669, respectively.

- The lowest ratio (indicating a non-shortage area) was 508 persons per primary care provider in Davidson County. The highest ratio 1:5,102 (indicating a shortage area) was in Jackson County, making that county the most underserved county in the State. Of the metropolitan counties, Madison County had the highest ratio (1:1,251), followed by Sullivan County (1:1,111).

- Primary care physician-to-population ratios were lowest in Davidson (1:508) and Knox (1:657) Counties, and highest in the Upper Cumberland Region (1:2,480).

- The statewide pediatric care physician-to-population ratio is 1:1,271. In the metropolitan counties, the ratio is 1:788, and in the nonmetropolitan counties, the ratio is 1:2,150.

- The TennCare primary care provider-to-population ratio statewide was 1:788. In the nonmetropolitan counties, the ratio was 1:1,793, and in the metropolitan counties, 1:406. Nonmetropolitan provider-to-population ratios were more than 4 times higher than those for metropolitan areas.

Health Resource Shortage Areas, as of December 1999

- As of December 1999, the Tennessee Commissioner of Health had designated 85 Rational Service Areas (RSA's) for primary care, general pediatric care, and TennCare primary care. Thirty-five RSA's for obstetrics were designated.

- Of the 85 RSA's designated for primary care, 28 (33%) have been designated as resource shortage areas. These shortage areas included 30 counties with some clustering in East, Northeast, West, and Southwest Regions of Tennessee.

- Obstetrical (OB) service shortage areas, i.e., RSA's with inadequate or no OB services, represent 43% (15 out of 35) of the OB RSA's in 1999. As of July 1999, the following counties or sections of counties, were OB shortage areas: Fayette, Haywood, Henry, Benton, Hardin, McNairy, Humphreys, Dickson, Perry, Lewis, Maury, Giles, Marshall, Hickman, Robertson, Macon east, Trousdale, Smith, Wilson east, Lincoln, Pickett, Clay, Overton, Fentress, Warren, Grundy, Van Buren, DeKalb, Scott, and Cocke Counties.

- Twenty-nine (34%) of the 85 RSA's for pediatric primary care were designated as shortage areas.

! Resource shortage areas for TennCare primary care in 1999 included 27 of the 85 (32%) RSA's. These shortage areas cluster in the Northeast, East into the Northeast, and Southwest Regions of Tennessee.

Source: **Health Access Plan Update: Health Shortage Areas,** Tennessee Department of Health, Bureau of Health Services, July 2000.

Manpower in Tennessee: Ratios of Persons Licensed as Health Care Providers to Population, 1999[25]

! In Tennessee in 1999, 12,550 persons in 94 counties held licenses to practice as medical doctors. Statewide, there was a ratio of one MD licensee per 437 persons. Aside from Moore County, where no physicians were licensed, the counties with the lowest licensees per thousand population ratios were Grainger County with 0.10 licensee per thousand persons and Cheatham County with 0.19 per 1,000. Counties with the highest licensee per thousand population ratios were Davidson County (5.29 per 1,000), Washington County (5.09 per 1,000), and Madison County (4.02 per 1,000).

! In 1999, 2,818 people held licenses to practice as dentists across 92 counties. The Tennessee licensee-to-population ratio was 1:1,946. Counties with the lowest ratios of licensees per thousand population were Van Buren, Pickett, and Moore Counties, which had no dentists, while Grundy County had a prevalence of 0.07 licensees per thousand population. Davidson (0.83 per 1,000), Anderson (0.77 per 1,000), and Shelby (0.73 per 1,000) Counties had the highest ratios of licensees per thousand population.

! In 1999, 52,505 people were licensed as registered nurses (RNs) in 95 counties. Statewide, the licensed RN-to-population ratio was 1:104. Van Buren (1.4 licensees per 1,000 persons), Moore (1.75 per 1,000), and Union (1.99 per 1,000) Counties had the lowest licensees per thousand population ratios. The highest ratios of licensees to population were in Davidson (18.65 per 1,000), Madison (18.35 per 1,000), and Washington (16.37 per 1,000) Counties.

! Individuals licensed as practical nurses (LPNs) totaled 21,980 across the 95 Tennessee counties. The licensee-to-state population ratio was 1:249.5. Union (1.39 per 1,000 persons), Grainger (1.63 per 1,000), and Williamson (1.84 per 1,000) Counties had the lowest ratios of LPN licensees per thousand population among the counties in Tennessee. Fentress (9.41 per 1,000), Clay (8.67 per 1,000), and Scott (7.26 per 1,000) Counties had the highest ratios.

[25]These measures indicate potential health care resources in 1999. These are potential resources because some licensees were not practicing.

- In 1999, 1,111 psychologists were licensed of which 556 were clinical psychologists licensed in Tennessee and distributed across 47 counties. The ratio of licensees-to-statewide population is 1:4,936. When the range is calculated across regions[26], the lowest ranges for regional licensees per thousand population ratios were found in the Southeast (0.0 to 0.07 per 1,000), and the Northwest (0.0 to 0.06 per 1,000) Regions. Counties that had the highest licensed psychologists-to-population ratios were Knox County (0.53 per 1,000), Davidson County (0.47 per 1,000), and Washington County (0.44 per 1,000).

- Licensed social workers totaled 2,431 across 67 counties. The ratio of licensed social workers to the state population was 1:2,256. The lowest number of licensees per thousand population was in the Upper Cumberland Region (0.0 to 0.33 per 1,000), Southeast Region (0.0 to 0.32 per 1,000), and South Central Region (0.0 to 0.20 per 1,000). The highest ratios for licensed clinical social workers per thousand population were in Davidson County (1.11), Knox County (0.90), and Washington County (0.78).

- Statewide, the total number of licensees for alcohol and drug abuse counseling who were working full-time or part-time was 265. Alcohol and drug abuse counseling licensees were located in 44 counties. The statewide ratio of alcohol and drug abuse counseling licensees to state population was 1:20,693. The following regions had the lowest ratios of licensees per thousand population: Upper Cumberland Region (0.0 to 0.10 per 1,000), Southwest Region (0.0 to 0.08 per 1,000), and Mid-Cumberland Region (0.0 to 0.07 per 1,000). Lewis (0.27 licensees per 1,000 persons), Bledsoe (0.18 per 1,000), and Madison (0.13 per 1,000) Counties had the highest licensee-to-population ratios. In addition, there were 279 licenses who state they are not practicing.

- In 1999, there were 12,226 emergency medical personnel and first responder licensees in Tennessee. All 95 counties had licensees for these services. The ratio of licensees-to-state population was 1:449. Counties with the lowest ratios of EMS and first responder licensees per thousand population were Obion County (0.62 per 1,000 population), Perry County (1.06 per 1,000), and Bledsoe County (1.19 per 1,000). Highest EMS ratios were found in Johnson County (5.44 per 1,000), McNairy County (5.39 per 1,000), and Morgan County (4.28 per 1,000).

- In Tennessee, 55,563 persons were licensed for other health care occupations and services. The ratio of other licensees to the state population was 1:99. These occupations and services include athletic trainers, laboratory personnel, dietitians, podiatrists, electrologists, optometrists, chiropractors, and various health care associates, specialists, assistants, technicians, and administrators.

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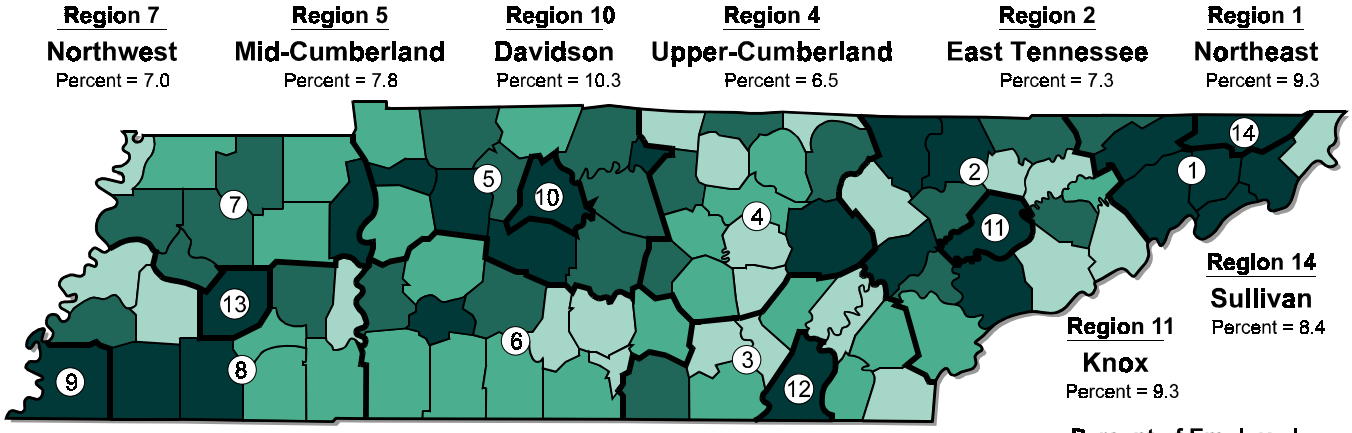
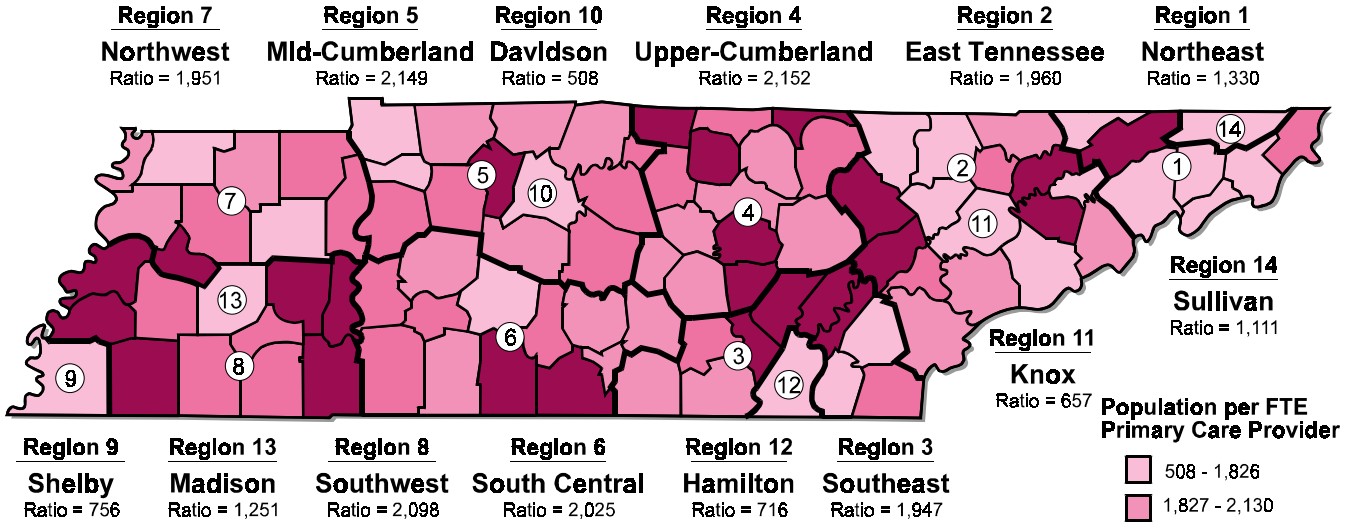
[26] Because there are few or no psychology licensees in most counties, regional-level data are given.

PERCENT OF EMPLOYED PERSONS AGED 16+ WORKING IN HEALTH SERVICES BY COUNTY AND REGION, TENNESSEE, 1990



Source: U.S. Census, 1990, and HIT Web site (server.to/hit)

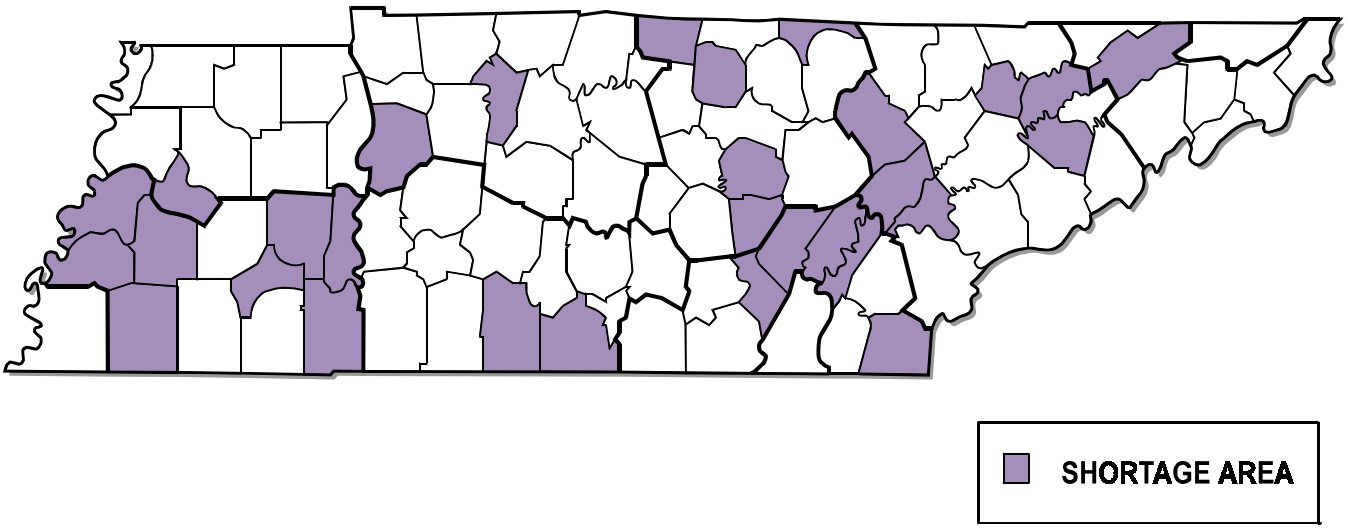
FTE PRIMARY CARE PROVIDER-TO-POPULATION RATIO BY COUNTY AND REGION, TENNESSEE, 1999



Note: Ratio obtained by dividing county population by number of full-time equivalent (FTE) primary care providers in the county.

Source: Health Access Plan Update: Health Shortage Areas, Tennessee Department of Health, Bureau of Health Services, July 2000.

HEALTH RESOURCE SHORTAGE AREAS FOR PRIMARY CARE, TENNESSEE, 1999



Note: These apply only to family medicine and internal medicine specialties.
Source: Health Access Plan Update: Health Shortage Areas, Tennessee Department of Health, Bureau of Health Services, July 2000.

COMMUNITY DIAGNOSIS: PRELIMINARY ASSESSMENT OF COMMUNITY PRIORITIES

! In 1995, the Tennessee Department of Health (TDH) instituted the Community Diagnosis Initiative, a county-level grassroots planning process organized in local communities, through regional and county health departments and regional and county health councils.

! The Initiative is a bottom-up process, with planning and assessment moving from the county level to the state level.

! County health councils are responsible for assessing and identifying health needs, and for developing programs to improve community health. The Community Diagnosis Initiative was intended to bring together county residents from diverse educational, ethnic, and professional backgrounds to work toward improving the health of their communities.

! Health council members include community and religious leaders, representatives from education and business, medical practitioners, public health officials, local citizens, consumers and others.

! Now, all 95 counties have established health councils, have assessed county health demographic data and health status indicators, and have prioritized health issues and problems. Eighty-seven counties have produced interim reports that are available on the HIT Web site (**server.to/hit**).

Prioritized Ranked County Health Problems

! To compare prioritized problems across counties, specific county-level priorities were combined into more general categories. These categories were drawn from the Healthy People 2010 National Health Promotion and Disease Prevention Objectives.

! Alcohol and other drug use/abuse (AOD) was by far the most frequently identified problem by county health councils. Seventy-seven percent of counties ranked AOD as a prioritized health problem. When counties identified a risk group for specific problems, this group was most often youth. Youth health problems were identified in 76% of counties.

County Health Councils

! As the Community Diagnosis Initiative continues, health councils will be involved in identifying and implementing programs to reduce these health problems. Understanding the composition and activities of local health councils will allow for

more in-depth analysis of the Community Diagnosis process and the outcomes of county level programs.

! Most health councils were formed in 1997 as part of the Community Diagnosis process. However, the range of dates of inception for health councils spans the period from 1968 to 1999.

! The average number of health council members was 26, with a range from 12 to 75.

! Twenty-two percent of health councils used or adapted a planning model to establish priorities. Examples of these models include "ACTION", "PEARL", and the J.J. Hanlon method.

Top Five Affiliations of Health Council Members

! When combined into a single group, health care providers and administrators formed the largest professional group involved in community diagnosis: 99% of councils included at least one health care provider or administrator.

! Ninety-four percent of county health councils included one or more local health officials. Facility administrators were included on 88% of health councils, educational representatives on 86%, and local citizens/consumers and elected officials were on 74% of councils each.

Other Affiliations of Members

! Seventy-two percent of health councils had at least one representative from a voluntary association; 60% had one or more medical doctors; 60% included one or more business representatives; 57% had at least one mid-level medical practitioner; 52% had one or more mental health professionals; 47% had one or more university affiliates; and 46% had other medical practitioners.

! Forty-two percent of health councils had at least one member who was a religious leader, 38%, a law enforcement official, 30.5%, a banking/insurance/investment representative, 27%, a judicial official, 18%, a dentist or dental professional, and 17%, a representative of a child care or youth organization.

Next Steps

! County Health Councils have begun implementing intervention programs to reduce identified health problems in their counties.

! The Tennessee Department of Health (TDH) and the Community Health Research Group (CHRG) of The University of Tennessee will continue to evaluate the whole Community Diagnosis process, including:

A) Assessing the characteristics of counties and local health councils associated with selecting certain top ranked priorities or problem areas, and

B) Using uniform and standardized data and measures from each county to monitor changes in prioritized community health problems over time

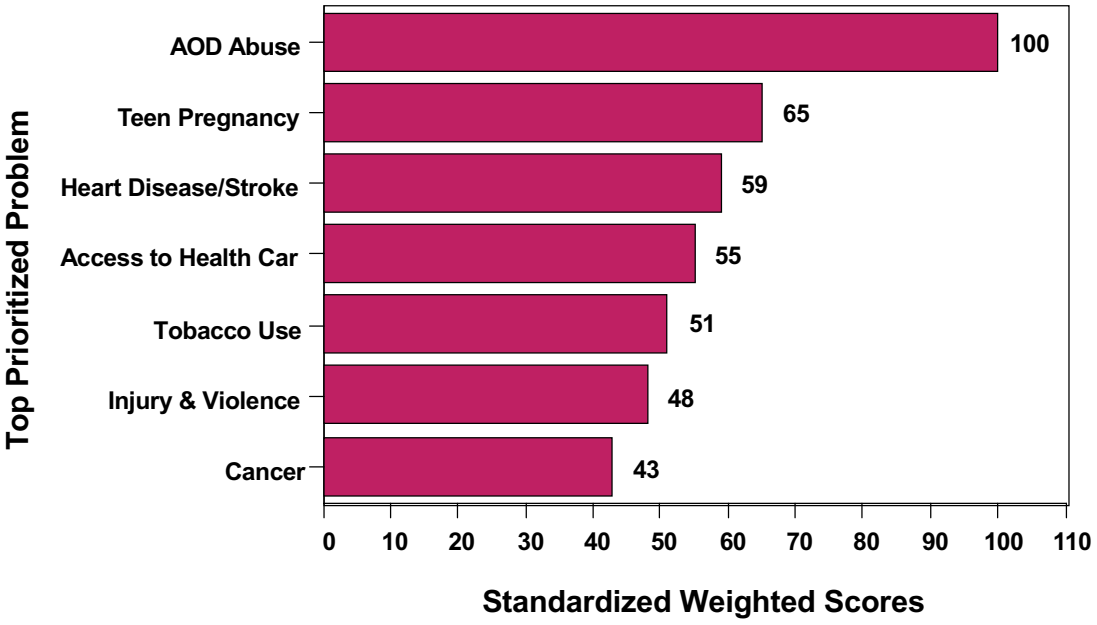
Results of the evaluation will be available on the HIT/SPOT Web site (server.to/hit).

! The TDH and CHRG will continue to monitor 2010 objectives, including tracking data coverage for measures.

! The TDH has formed a State Health Improvement Planning (SHIP) Commission, with key workgroup members drawn from communities and intergovernmental agencies throughout the state and intradepartmentally at TDH. The Commission will help the Tennessee government formulate a comprehensive and strategic State Health Improvement Plan.

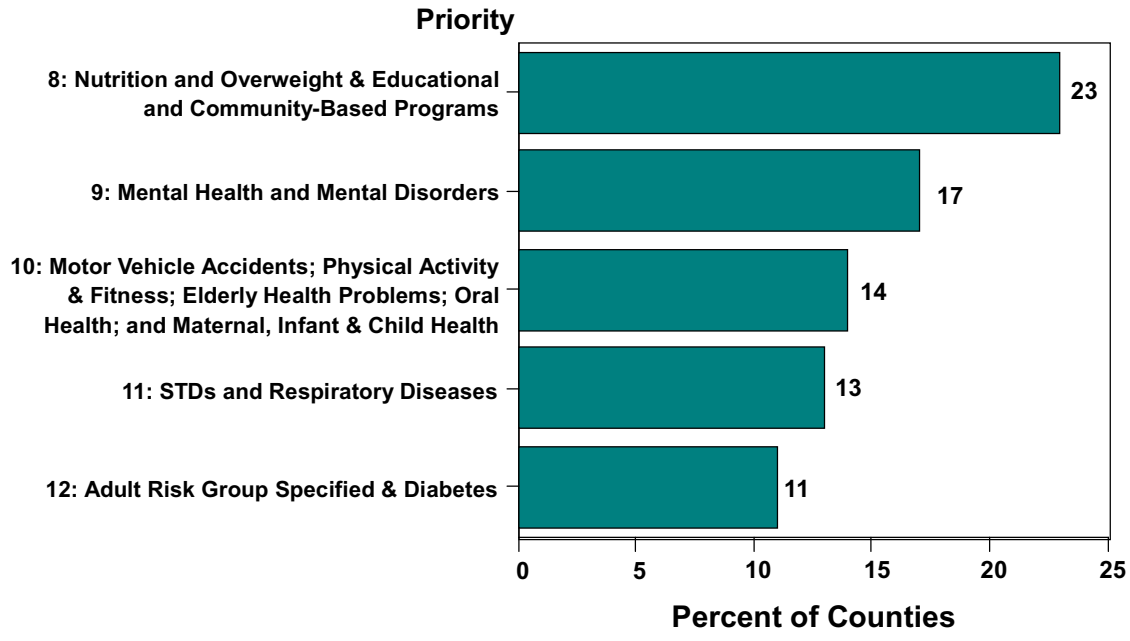
! A section of the Health Information Tennessee Web site is now devoted to an on-line public survey soliciting local health concerns and priorities under “Tennessee State Health Improvement Plan.” Also included is a URL link to e-mail a TDH staff person for suggestions and comments on the State Health Improvement Plan, and a set of slides from a recent presentation on *Health Assessment and Planning: Where Do We Go From Here?* presented at the Tennessee Public Health Association Annual Meeting, Nashville, Tennessee on September 28, 2000.

Final Top Health Priorities by Standardized Weighted Scores Relative to AOD Abuse



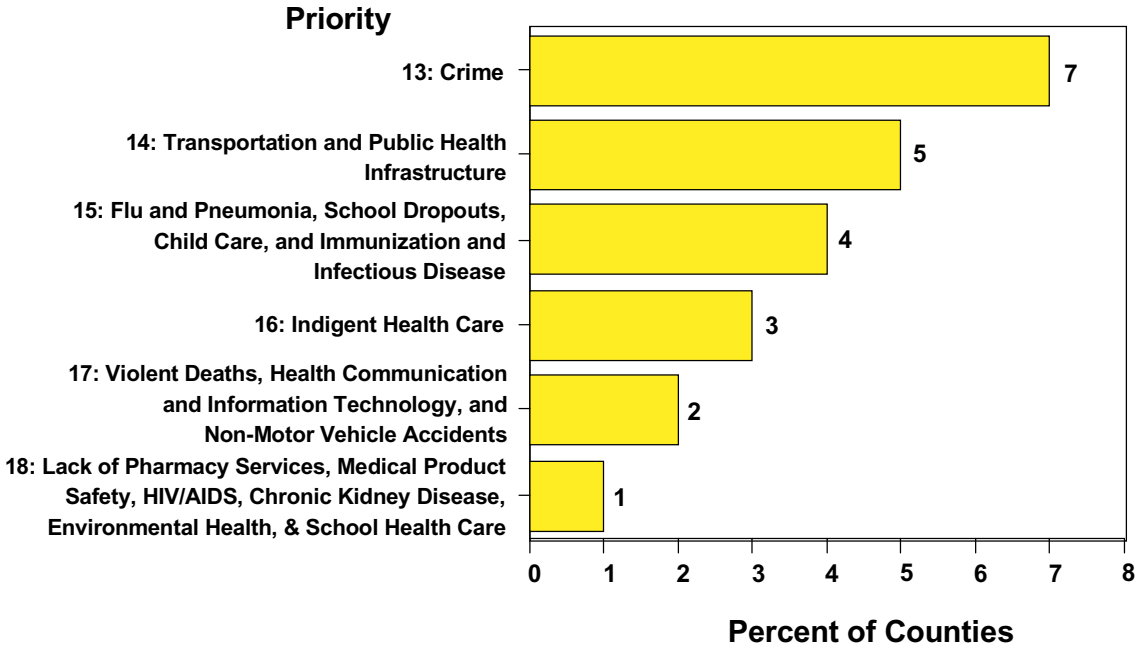
Source: Community Diagnosis Initiative Evaluation, CHRG, 2000.

Unweighted Ranking of Health Priorities by Less than 25 Percent of Counties



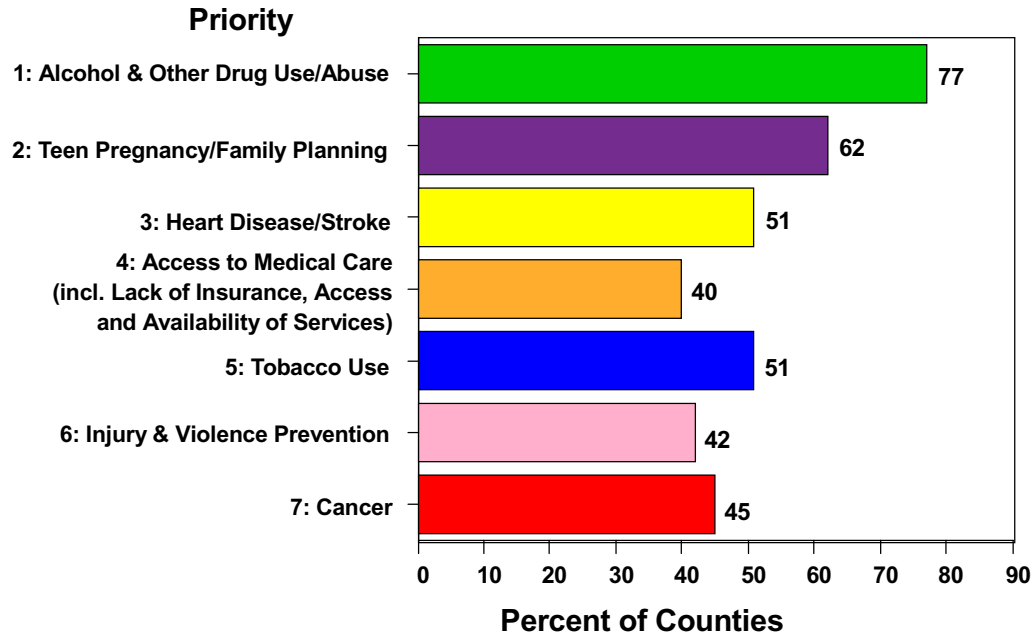
Source: Community Diagnosis Initiative Evaluation, CHRG, 2000.

Unweighted Ranking of Health Priorities by Less than 10 Percent of Counties



Source: Community Diagnosis Initiative Evaluation, CHRG, 2000.

Unweighted Ranking for the Highest Priority Health Problems Mapped to 2010 Objectives by Percent of Counties



Source: Community Diagnosis Initiative Evaluation, CHRG, 2000.

EMERGING HEALTH CARE INITIATIVES

The Tennessee Department of Health (TDH) is committed to a range of responses to the health care needs and problems of Tennesseans. The following initiatives are underway:

! System of Care for Children in Custody

The Department of Health is the lead agency for implementing a remedial plan to provide children in state custody adequate and timely health services under the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) mandate of the Medicaid Act.

Under the plan submitted on May 16, 2000, the System of Care includes the following new features:

-- "Centers for Excellence" (COE's) are five tertiary pediatric care sites, which have been and will continue to be safety net providers, in that COE's may authorize services denied by the medical care organization or behavioral health organization for children in custody. The providers of services will then receive payment either from the managed care entity or the state depending on the results of the appeal process.

-- The "Best Practice Network" (BPN) is a group of primary care providers, pediatricians, and family practice physicians who are willing to take on the added responsibility of children in custody. The primary care providers will receive reimbursement directly from TennCare. The Network will also include behavioral health providers. Dental providers are also included. All BPN providers agree to attend training, to coordinate all the health information, and to work with other agencies for the benefit of the child. All BPN providers will be expected to follow Best Practice Guidelines which are in the process of development.

! Public Health Workforce Development

Responding to the national urgency for workforce development in the health field, as well as in all areas of government, the Tennessee Department of Health (TDH) is taking a pro-active role in educating employees to function effectively in a changing environment. The Department of Health and Human Services responded to the dual trends of (1) Continually changing ethnic, racial, immigrant, age and economic populations, which require increasingly skilled public health professionals, and (2) Rapid and dramatic changes in the health care system, by establishing a Subcommittee on Public Health Workforce, Training and Education in 1994. The

mission was to provide a profile of the current public health workforce and make projections into the 21st century; address the training and education issues needed to ensure a competent workforce; analyze minority representation and evaluate programs to increase representation; and develop a strategic plan using distance learning approaches to provide high-priority education and training.

In accordance with recommendations of the 1999 report by the Public Health Leadership Society, Center for Health Leadership, and concerned that 57% of State public health employees are eligible to retire in the next 15 years, TDH is responding on several fronts. In September, 1999, the TDH became a participant in the University of North Carolina Public Health Leadership Institute. The Department also supports top executives in the Center for Disease Control's Public Health Leadership Institute conducted by the University of California, and now the University of North Carolina. Tennessee is one of six states participating in a newly funded Public Health Training Center at the University of North Carolina that will assess public health workforce training needs, develop workforce competency plans, and provide educational programming to strengthen workforce competency. And a Distance Learning Coordinator links federal and university distance learning programs with public health staff across the state to provide management and other health-related courses.

! Children with Special Health Care Needs (Title V CSHCN)

The Department of Health Children's Special Services (CSS) program provides medical and care coordination services to children from birth to age 21 who meet financial (less than 200% Federal Poverty Level) and diagnostic eligibility criteria. In FY2000, 5,000 children enrolled in the program received over 4,000 home visits and 15,900 other contacts. CSS provided over $680,000 in reimbursement for medical services (including inpatient/outpatient surgery, therapy, pharmacy, medical equipment and supplies) for children who had no insurance or had a need for medically necessary services that were not covered by private or TennCare insurance. Less than 1% of CSS enrollees did not have access to TennCare or other insurance; 91% of the children enrolled in CSS were also enrolled in TennCare.

The CSS Parent's Encouraging Parents (PEP) program is available to any individual or family and has no medical or financial criteria for participation. Parents of special needs children are employed by the CSS PEP program and teamed with a social worker or public health nurse to provide parent to parent support by matching trained support parents to another family with a child who may have a similar disability or chronic illness. The program provides training to parents of special needs children, community education, outreach and referral to special support groups. The PEP program processed 1,766 referrals for families, provided follow-up to 4,684 families and matched 329 families. Community education included

presentation at 301 professional meetings, 505 other meetings or organizations and disseminated close to 35,000 pieces of educational materials.

The CSS program continued to promote the implementation of voluntary newborn hearing screening for infants prior to discharge from the hospital. More than 42 hospitals now provide hearing screening to infants prior to discharge, about 62% of the TN birth population. Screening is not mandated but is becoming a standard of care. Hearing screening, utilizing specialized equipment, will be required by TennCare, by 2003, as part of the EPSDT standard exam for all newborns.

In FY00, the CSS program worked closely with other state and private agencies or organizations to develop, coordinate, and implement services for special needs children. As a result, there has been better coordination of services, family advocacy, family participation in program development, transition services (from child to adult medical, educational, and vocational), training for families and staff, access to care, reimbursement of services and computer linkages to improve communication. A formal interagency agreement was developed for this purpose

! Strategic Planning

Tennessee State Government has made significant strides in developing strategic plans at the departmental and the executive branch levels. We anticipate that these plans will one day be the roadmap that guides all activity within the departments. The executive branch established the core set of goals for Tennessee and asked each department/agency to build a complementary strategic plan with goals, objectives and performance indicators.

The Center for Effective Government, Department of Finance and Administration, manages the planning activities by providing technical assistance to the departments and periodically reviewing the plans and progress reports submitted.

The strategic planning process helps to identify the serious challenges to our public health and to develop actions we can take now that will determine how “healthy” we will be in the future.

The Tennessee Department of Health has identified the following goals to help us move toward a “Healthy Tennessee”: offer every child a safe, healthy start, and protect public health and safety.

! Sharing Health Information and Technology

The Department will continue to provide proactive leadership in the collection and dissemination of health data in Tennessee. TDH will continue to emphasize the development, utilization, and sharing of electronic technology to eliminate barriers

to communication, will promote networked data systems, and will continue to utilize the Internet and community access systems for these purposes.

! TennCare Re-Verification of Eligibility

In late 1999, the groundwork was laid for annual re-verification of all 500,000+ persons enrolled in TennCare as uninsured or uninsurable. Previously, only about 100,000+ had been re-verified annually. The Bureau of TennCare would continue each month to select the cases for re-verification and mail them letters requesting that they contact their local health department to schedule an appointment for re-verification. The local health departments would conduct the interviews, collect copies of applicable documentation, and update the TennCare computerized data base. The Bureau of TennCare would process the updated information and determine whether the persons would remain enrolled in TennCare and how much, if any, they would be required to pay as insurance premiums. As of March, 2000, the number remained at approximately 8,500 as in previous months, but in April, the number was increased to 25,000. In May, the number was increased to 35,000, and for June the number was 40,000. In July, none were done, 1,000 mentally ill in August, 40,000 in September, 33,000 in October, 7,900 in November and none in December. The health departments have staff to handle this volume of activity, and no significant problems have been reported. It is anticipated that once some of the backlog of cases is cleared, the monthly case load will be approximately 30,000.

IMPROVEMENT STRATEGIES: THE NEXT STEPS

- The implementation of a community diagnosis process has been the cornerstone of TDH's improvement strategy. The community diagnosis process has been used to develop a community-based, community-owned assessment of each county's health status under numerous health indicators. It has been the impetus for a planning process, which identifies strengths, weaknesses, and existing assets, and puts into motion a process to prioritize problems, and to design improvement strategies.

- The 95 individual county community diagnosis reports provide valuable information, on a county-by-county and region-by-region basis, about the opportunities for improvement in achieving optimum health status for community residents.

- During the July 1999 to June 2000 fiscal year, the Department of Health began to utilize the data collected in the community diagnosis plan in the construction of a State Health Improvement Plan, which will combine the goals of the 95 counties with the goals of the department and intergovernmental agencies and will reflect widespread community input and support.

HEALTHY KIDS INITIATIVE

The "Healthy Kids" Initiative is the Tennessee Department of Health's component of the "TNKIDS" Initiative. Healthy Kids is a broad initiative that seeks to improve the well-being of all children, families, and communities throughout Tennessee. The initiative includes the following programs, events, and awards.

! "Working Together for Healthy Kids" statewide conference as held in July, 2000. Over 300 people attended this conference held in Franklin, Tennessee.

! The Children's Information-Tennessee (CIT) Web site has been designed as a single source of information that allows case managers for state children's programs to contact each other about children who are mutual clients and develop coordinated service plans.

! HUG, a special case management service of local health departments for pregnant women and families with preschool children, is now available in all 95 counties of the state.

! The Community Prevention Initiative for Children is now implemented at 85 different sites. A wide variety of prevention programs have been created to reduce risk factors associated with teen pregnancy, high-school dropout, alcohol and drug abuse and other youth issues.

! Healthy Kids Community Awards were established to recognize communities that demonstrated an exceptional commitment to improving the lives of children and families. The 1999 winners were Houston County, Hardeman County and St. Elmo/Alton Park community of Chattanooga/Hamilton County.

-- Year 2000 Winners were:

West Region - The Henry County Health Council
Middle Region - Franklin Heights and Vaughn Street Learning Centers (Murfreesboro)
East Region - Loudon County Health Council.

The winners received $3,000 and a highway sign indicating that they are designated a Healthy Kids Community.

The Runners-up were:

West Region - The Teen Life Council of Decatur County
Middle Region - Safe Night of Hickman County
East Region - Success by Six of Blount County

The runners-up received a certificate of achievement from Governor Sundquist.

- Abstinence Education projects were funded in each public health region of the state to provide community-based intervention for children ages 10-17 that emphasize abstinence from sexual activity before marriage.

- All 95 local health departments have been enrolling eligible children in TennCare. The Tennessee Health care Campaign received funding from the Robert Wood Johnson Foundation to develop new outreach strategies to reach and enroll hard-to-reach populations.

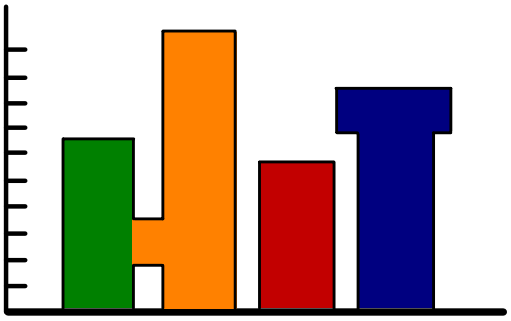
- Five county health councils are participating in an Assets Building for Youth pilot project. The counties are Cocke, Macon, Knox, Stewart and Shelby Counties.

- Department of Human Services, in collaboration with the Developmental Disabilities Council and the Tennessee Department of Health, is funding ten Child Care Resource Centers to provide technical assistance and training to providers.

This report has been authored by Sandra L. Putnam, Angela Fenner, Rhett Graves, Julianna Dykes, Ian Rockett, and Haomiao Jia of the Community Health Research Group, The University of Tennessee, Knoxville. Special thanks are extended to Renee Johnson, Roberta Neiderjohn, Abby Stacy and Fred Stout of the CHRG for their excellent work on the report. The assistance of Bill Wirsing, Tom Spillman, George Plumlee, Becky Hawks, and their colleagues at the Tennessee Department of Health, essential to producing this report, is much appreciated.

HEALTH INFORMATION TENNESSEE

TENNESSEE DEPARTMENT OF HEALTH



UTK COMMUNITY HEALTH RESEARCH GROUP

A Partnership Between

Visit us on the Web at *server.to/hit*
or http*://web.utk.edu/~chrg/hit/index.htm*

ABOUT THE HEALTH INFORMATION TENNESSEE (HIT) WEB SITE

The Health Information Tennessee (HIT) Web site **(server.to/hit)** is the innovative product of a partnership of the Tennessee Department of Health (TDH) and The University of Tennessee Community Health Research Group (UT CHRG). It was designed as an interactive means of disseminating vital statistics, manpower, facilities, survey and other data collected by the TDH and reported on by the UT CHRG in the **Tennessee Health Status Reports of 1997, 1998, 1999,** and **2000**. The goal of the project has been to support the bottom-up, community-based health planning effort called the Community Diagnosis Initiative adopted by the TDH in 1995. Through the Health Status Reports and the HIT Web site, fourteen regional health councils representing 95 counties have assessed and prioritized community needs and are planning for effective prevention and intervention. The Internet was the chosen medium for data and report dissemination to provide ready access to summary statistics, data tables, and maps at the local level.

HIT (Health Information Tennessee) was created in January 1997. HIT not only provides a variety of previously calculated health and population statistics and prepared tables, but incorporates Statistical Profiling of Tennessee or SPOT. SPOT employs a lesser used Internet feature, Common Gateway Interface (CGI), to allow the user the opportunity to query various Tennessee health data bases in such a way that personalized plots, maps, charts and tables can be produced upon demand, interactively. The requested information is calculated at the moment the query is submitted by a self-modifying SAS program residing on a server computer at The University of Tennessee. In this way data can be analyzed and presented in an infinitely flexible manner; statewide and substate comparisons can be made; data can be standardized and updated regularly; data quality and accuracy can be assured; and access can be widespread and multifocal.

Data from three random sample surveys conducted in Tennessee by the Community Health Research Group for the Bureau of Alcohol and Drug Abuse Services are available for use on HIT/SPOT. These include the Tennessee Adult Alcohol, Tobacco and Other Drug (ATOD) Needs Assessment Survey of 1993 (n = 8000), Tennessee High School ATOD Survey of 1995/1997 (n = 102,000) and the Tennessee Health and Lifestyles Survey of 1998 (n = 11,000). The first two data sets provide regional and statewide data for comparison and analysis in SPOT; the latter survey provides county-level comparisons.

Survey and other data sets, including mortality, natality, population, hospital, nursing home, census, crash, and school data sets, can be used to triangulate on community problems. Examples of questions that can be answered using SPOT include what are the leading causes of death among particular gender, racial/ethnic, age, socioeconomic status and geographic groups, or how do cause-specific illness or injury death rates in a county or region seem to be related to adult and youth health risks in that county or region and what hospital-based and other services are available for treatment. Such questions can be answered using comparisons of excess death rates by cause, excess risk factors for those death rates from survey data, and resource availability and accessibility data from joint annual surveys of facilities.

The burden of illness and injury mortality can be displayed as data listings and tables, county rankings, shaded maps, pie or bar charts, or plots at county, regional, and statewide levels. Interactive GIS capabilities on the Web site on HIT MAPMAKER allow for customized mapping of related exposures by overlaying census data with vital statistics, as well as overlays of cities and towns, hospitals, nursing homes, schools, and alcohol and drug treatment facilities. Data can be analyzed by age, sex, race, education, poverty status, Hispanic origin, and residence to yield comprehensive profiles of health exposures, risk and need for services in Tennessee using HIT and SPOT.

The mapping ability in HIT MAPMAKER greatly expands the utility of SPOT for community-based health needs assessment. The GIS component of HIT enables the user to customize maps at county and census tract levels. Basic atlas functions are provided interactively, along with bivariate overlay mapping using SPOT data. The user interface is friendly and straightforward. Site users are able to create, view, alter, download, and print maps. Pan, zoom and identify functions are available as are limited buffer functions. Data from the SPOT component is able to be transferred to the mapping program to produce age-sex-race and region-specific one and two variable maps of mortality, population, birth and census data, mapped in relation to locations of hospitals, nursing homes, schools, and other facilities.

Another addition to HIT is Summary County Results Explorer (SCORE). SCORE uses aggregate, rather than case level, data to provide customized outputs similar to SPOT. The prototype of SCORE uses Tennessee KIDS COUNT data by year and supports the Tennessee Governor's Initiative on Children and Youth, TNKIDS. SCORE also provides GIS functions through HIT MAPMAKER.

For more information, please contact The University of Tennessee, Community Health Research Group, Suite 309, Conference Center Building, Knoxville, Tennessee 37996-4133, phone: 856-974-4511 or e-mail: chrg@utk.edu or sputnam1@utk.edu.

HIT: Health Information Tennessee

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TNKIDS

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Be sure to visit SPOT

A PARTNERSHIP BETWEEN

TENNESSEE DEPARTMENT OF HEALTH

UTK COMMUNITY HEALTH RESEARCH GROUP

Welcome to HIT!

Tennessee State Health Improvement Plan

(URL address: "server.to/hit" or "http://web.utk.edu/~chrg/hit/index.htm")

HIT is a public health informatics project to disseminate data interactively

- to identify population health problems and high risk groups, and
- to assess need for prevention, treatment, and rehabilitation services in Tennessee.

This is an official Web site of the Tennessee Department of Health, developed and maintained by the Community Health Research Group at The University of Tennessee.

To fully utilize the innovative features of this interactive data site, be sure to visit

- HIT Directory and Site Map
- SPOT (Statistical Profiling of Tennessee)
- MAPS/GIS
- TNKIDS

Also visit the Tennessee Department of Health, Office of Health Statistics and Research, at http://www.state.tn.us/health/statistics/

Browser Suggestions

Contact Information

Please contact us if you have any questions or suggestions.
e-mail CHRG

THIS SITE IS OPTIMIZED WITH NETSCAPE NAVIGATOR AND ADOBE ACROBAT READER

DATA COMPENDIUM AND SOURCES FOR THE TENNESSEE HEALTH STATUS REPORT, 2000

The Tennessee Department of Health (TDH) collected the majority of the raw data cited here, or collaborated with and sponsored other organizations to collect the data. Collaborating with TDH, the Community Health Research Group of The University of Tennessee (UTK-CHRG) analyzed and reported on the data for this preview. In addition to data analysis and reporting, the UTK-CHRG conducted the Tennessee Health and Lifestyles Survey under sponsorship of the Tennessee Department of Health, Bureau of Alcohol and Drug Abuse Services.

The data compendium and other sources are alphabetized by name of study/data set.

! **Name of the Study/Data Set: Adult Behavioral Risk Factor Surveillance System (BRFSS), 1998**
Sponsor: Tennessee Department of Health
Source: Tennessee Statewide Survey Data, 1998 (Weighted), Centers for Disease Control and Prevention
Description: This weighted data set is based on a survey administered to a random sample of the general population of adults, ages 18 and over, living in households in all 50 states. It provides general information about health risks, behaviors, and attitudes of those sampled. The survey is designed to provide uniform data to identify chronic disease risks and to guide health promotion and disease prevention programs. Interviews were conducted by telephone with respondents who were randomly selected from adult members of households in Tennessee. BRFSS results were also reported in the *State Prevalence Report of Risk Factors for Tennessee, 1998*.

! **Name of the Study/Data Set: Youth Hospital Discharges with Asthma Diagnoses, 1998**
Sponsor: Tennessee Department of Health
Source: Tennessee Department of Health, Health Statistics and Research, Hospital Discharge Data, 1998
Description: Provisional, unpublished data, current as of June 6, 2000, that covers hospital discharges for youths (ages 0-21) who were diagnosed as having asthma and were treated in 1998. The counts are organized by gender, age group, type of admission, type of bill, type of diagnosis, and type of insurance coverage.

! **Name of the Study/Data Set: Children's Health and Well-Being Data, 1992 - 1999**
Sponsor: Tennessee Department of Health and Tennessee Department of Education
Source: Tennessee Department of Health TNKIDS data set
Description: A collection of demographic and other health status measures relevant to children's health and well-being in Tennessee. This data is available for custom queries on the HIT/SPOT Web site (**server.to/hit**). Measures cover the years spanning 1992 to 1998.

! **Name of the Study/Data Set: Communicable Disease Data, Tennessee, 1999**
Sponsor: Tennessee Department of Health
Source: Tennessee Department of Health
Description: This data is from the Tennessee Department of Health Surveillance Program, Tuberculosis Control Program, and Division of HIV/AIDS Surveillance.

! A report on the **Community Diagnosis Initiative** can be obtained online at **server.to/hit** under the 'State Health Improvement Plan' link. Further information can be obtained by contacting the Tennessee Department of Health, or the Community Health Research Group of The University of Tennessee at Knoxville.

! **Health Care Licensee** information for 1999 was obtained from an unpublished year-end raw data set provided by the Tennessee Department of Health. The raw data contains counts of licensees by area of licensure by county.

! **Health Manpower** information for Tennessee was drawn from the **Health Access Plan Update: Health Shortage Areas,** Tennessee Department of Health, Bureau of Health Services, July 2000.

! **Healthy People Objectives** Data:

Summary of Notifiable Diseases, United States, 1998. Morbidity and Mortality Weekly Report, CDC, December 31, 1999, 47(53); 1-93.

Healthy People 2000: Healthy People 2000 Review, 1997. National Center for Health Statistics, Hyattsville, MD: 1997.

Tennessee's Healthy People 2000. Tennessee Department of Health, Health Statistics and Information, Nashville, TN: 1996.

! **Name of the Study/Data Set:** HIV and AIDS in Tennessee, 1999
Sponsor: Tennessee Department of Health
Source: Tennessee Department of Health
Description: Information gathered from "AIDS/HIV Update" in *Epi-News*, a Tennessee Department of Health Publication, and from the TDH's STD/HIV Program of the HIV/AIDS Surveillance Section. For more information, please contact Herb Stone at hstone @ mail.state.tn.us or 615-532-8495.

! **Health Facilities** data is drawn from:

Joint Annual Report of Hospitals. Tennessee Department of Health, Health Statistics and Research, 1999. This is also accessible online at the HIT/SPOT Web site (**server.to/hit**).

Joint Annual Report of Nursing Homes. Tennessee Department of Health, Health Statistics and Research, 1999. This information is also accessible at (**server.to/hit**).

! **Intentional and Unintentional Injury** data. *Fact Book and Injury Profile for Tennessee, 2000.* National Center for Injury Prevention and Disease Control, Centers for Disease Control and Prevention, 2000. This report covers rates of mortality due to specific causes of injuries in Tennessee as compared with the United States.

! **Name of the Study/Data Set: Mortality Data**
Sponsor: Tennessee Department of Health
Source: Tennessee Department of Health, Certificates of Death
Description: This data set includes information on all deaths occurring in Tennessee as well as deaths occurring out-of-state to Tennessee residents for the years 1990-1998. Basic demographic characteristics are available for the decedent along with detailed information pertaining to the cause of death. Data linking infant deaths (under 1 year of age) with their corresponding Tennessee birth record are available.

! **Name of the Study/Data Set: Population Data, 1990 - 2000**
Sponsor: Tennessee Department of Health
Source: Tennessee Department of Health
Description: Population estimates are available for the years 1990 - 2000, by race, gender, age, and county. [Note: the 1990 data are the actual Census counts for that year.] Data are available by single years of age through age 79. Ages 80-84 are grouped together into one category and ages 85 and over are represented by 85+. Race categories are white, black, and other.

! **Name of the Study/Data Set: School Health Data, 1993-1994 to 1998-1999**
Sponsor: Tennessee Department of Education
Source: Tennessee Department of Education Annual Statistical Report, 1998-1999
Description: The Annual Statistical Report, which includes information on students' health in Tennessee, is available at the Tennessee Department of Education Web site (www.state.tn.us\ education).

! **TennCare enrollment** data is from the Bureau of TennCare, Tennessee Department of Health, May 2000. It is accessible on the Web at (**www.state.tn.us/tenncare /enrol-co.htm**).

! **Name of the Study/Data Set: Tennessee Adolescent Pregnancy Summary Data, 1990 - 1998**
Sponsor: Tennessee Department of Health
Source: Tennessee Department of Health, Health Statistics and Research
Description: Published in January of 1999, this report covers adolescent pregnancy, birth rates, and adverse conditions during pregnancy and after childbirth in Tennessee for the years 1990 through 1998.

- **Name of the Study/Data Set: Tennessee Health and Lifestyles Survey, 1998**
  Sponsor: Tennessee Department of Health, Bureau of Alcohol and Drug Abuse Services
  Source: Community Health Research Group at The University of Tennessee, Knoxville
  Description: This was a statewide random digit dial telephone survey of approximately 11,000 Tennessee adults ages 18 and over living in households in 1998. The purpose of the survey was to provide data necessary for alcohol and other drug prevention planning, evaluation, and resource allocation. The study employed a county-level two-stage probability sample. The 14 Tennessee Department of Health regions - 6 metropolitan counties and 8 nonmetropolitan regions - served as analytic units. Data on a range of health behaviors and risks, particularly those related to AOD, are available for 70% of Tennessee's population.

- **Name of the Study/Data Set: Tennessee Highway Crash Data Base, 1990 - 1997**
  Sponsor: Tennessee Department of Safety
  Source: Tennessee Department of Safety
  Description: Information is available on the characteristics of highway crashes throughout the state, compiled by year. Categories of data include characteristics of the crash, roadway, environmental conditions, vehicles, and persons. Highway crash data is also available on the HIT/SPOT Web site (server.to/hit).

- **Name of the Study/Data Set: Youth Risk Behavior Surveillance System (YRBSS), 1999**
  Sponsor: Tennessee Department of Health and Tennessee Department of Education
  Source: Centers for Disease Control and Prevention
  Description: The Youth Risk Behavior Surveillance System (YRBSS) includes both a national school-based survey conducted by the CDC as well as state and local school-based surveys conducted by state and local education agencies. The system monitors six categories of priority health-risk behaviors among youth and young adults: behaviors that contribute to unintentional and intentional injuries; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and STD's, including HIV infection; unhealthy dietary behaviors; and physical inactivity.

For more information please contact Dr. Sandra Putnam, CHRG-UTK, sputnam1@utk.edu; (865) 974-4511, or Bill Wirsing at Tennessee Department of Health, bwirsing@ mail.state.tn.us; (615) 532-7901.